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IN THE CIRCUIT COURT, FOURTH
JUDICIAL CIRCUIT, IN AND FOR
DUVAL COUNTY, FLORIDA

CASE NO.: 00-02790-CA
DIVISION: CV-B

MICHAEL L. McMULLIN and
KELLI McMULLIN,
Plaintiffs,

vs.

U.S. SMOKELESS TOBACCO COMPANY,
Defendant

10

11

12 ORAL AND VIDEOTAPED DEPOSITION OF

13

CARL PHILLIPS, Ph.D.

14

SEPTEMBER 26, 2002

15

16 Deposition of CARL PHILLIPS, Ph.D. taken on the
17 26th day of September, 2002, beginning at 1:57 p.m.,
18 in the offices of Skadden, Arps, Slate, Meagher &
19 Flom, LLP, 1600 Smith Street, Suite 4400, Houston,
20 Texas 77002, before Elaine P. Maspero, RPR,
21 Certified Shorthand Reporter and Notary Public in
22 Harris County, for the State of Texas, pursuant to
23 the Florida Rules of Civil Procedure.

24

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ORIGINAL

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ALSO PRESENT:

Mr. Charles Levin, Videographer

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01:57 1 4
THE VIDEOGRAPHER: Time is 1:57 p.m.,
2 we're on the record.

3
4 CARL PHILLIPS, Ph.D.,
5 having been first duly sworn, testified as follows:
6

7 EXAMINATION

8 BY MR. SPOHRER:

9 Q. Sir, could I have your full name, please?

01:57 10 A. Carl Phillips.

11 Q. What is your profession or occupation?

12 A. I am a professor of public health. I'm an
13 epidemiologist, policy analyst and economist.

14 Q. And where do you work?

01:57 15 A. At the University of Texas School of
16 Public Health at the UT Houston campus.

17 Q. What is epidemiology, sir?

18 A. Epidemiology is the use of quantitative
19 information to study the relationship of exposure
01:58 20 and disease in humans.

21 Q. Okay. What diseases have you studied in
22 your career?

23 A. I've looked at quite a few different
24 diseases in various things that I have done.

01:58 25 Q. Okay. Could you give us some examples?

5

01:58 1 A. I have looked at heart disease. I have
2 looked at cancers of various sites. I have done
3 some work that had to do with stroke. I have done
4 some work that had to do with fetal maternal
01:58 5 health. Probably could keep going. I have looked
6 at Type II diabetes. I have looked a little bit at
7 injury, a couple of different kinds.

8 How long would you like me to keep trying
9 to list?

01:59 10 Q. That's fine. You seem to be slowing down
11 so we'll ask you something else.

12 In regard to your studies of those various
13 diseases or disease processes when you say you study
14 them as an epidemiologist, does that mean you try to
15 ascertain causes for those diseases?

01:59 15 ascertain causes for those diseases?

16 A. I did various things with various topics.
17 I could go into greater detail with what I did with
18 any one of them.

Sometimes it had to do with etiology,

01:59 20 which is a fancy word for causes of disease.

21 Sometimes it didn't focus so much on etiology.

22 Q. Okay. Which of these or other diseases
23 did you study the causes?

24 A. Well, in all cases it would of course have
25 to be some causes or certain causes rather than all

02:00 1 causes. Very seldom that somebody sets out to study
2 all the causes of a disease and I can't claim to
3 have made a specialization of all the causes of a
4 disease.

02:00 5 So for example, recent work I have done,
6 obviously, the study of smokeless tobacco and oral
7 cancer that we are here to discuss. I have looked
8 at some of the material that relates to recent
9 claims that the pharmaceutical phenylpropanolamine
02:00 10 causes stroke in young women. I have a couple of
11 current papers that deal with that.

12 A while ago when I was in graduate school
13 I looked at the relationship between moderate
14 alcohol consumption and the risk of heart attack.

02:01 15 Q. Okay. What is the product that you spoke
16 about with young women and stroke?

17 A. It's called phenylpropanolamine. It's
18 p-h-e-n-y-l, propanol, p-r-o-p-a-n-o-l, amine,
19 a-m-i-n-e. Sorry. I usually trust my spell checker
02:01 20 to take care of that for me.

21 Q. And is there a consumer name for that
22 product?

23 A. It was -- it was an ingredient in a lot of
24 different products. Contac cold medicine was one of
02:01 25 them. Alka Seltzer Plus Cold medicine contained

02:01 1 it. Quite a few others. I couldn't list them all.

2 Q. What did you conclude with respect to the
3 association of that compound and strokes in young
4 women?

02:02 5 A. Well, I should clarify. My work on that
6 had to do with -- was in reaction to somebody else's
7 study finding. In particular, there was a paper by
8 Curran et al, a lead author out of Yale, that was
9 front page -- literally front page of the New York
02:02 10 Times for several days after it came out about, I
11 guess it's coming up on two years ago.

12 And this one study had a rather dramatic
13 impact resulting in the ingredient being pulled out
14 of pharmaceuticals, pulled off the over-the-counter
02:02 15 market. And as a result, it is what I characterize
16 to be the most significant epidemiologic, sorry,
17 most significant impact of an epidemiologic study of
18 late and, therefore, it's an interesting study.

19 I didn't do field research on that. What
02:03 20 I did was research in response to the field research
21 that others had conducted.

22 Q. Did you concur with the findings of the
23 initial researchers that there was an association
24 between that compound and strokes in young women?

02:03 25 A. One of the things that I have done in

02:03 1 looking at that at is use it as an example of what
2 I've described as high stakes epidemiology. That
3 is, a study that is likely to produce a fairly
4 important result for the world. And the main
02:03 5 message in my work on this topic is that high stakes
6 epidemiology calls for great care, great attention
7 to uncertainty, possible sources of bias and so
8 forth. And I have pointed out ways in which
9 relatively plausible levels of bias would have led
02:03 10 to much less confidence in the result than was
11 implied by the headlines, the press releases and so
12 forth.

13 Q. Were you hired by any organization to do
14 that work?

02:04 15 A. No.

16 Q. With respect to high stakes epidemiology,
17 is that what you would characterize your work in
18 this case?

19 A. When I talk about high stakes
02:04 20 epidemiology, I'm usually focusing on major impact
21 of a single study and how the authors and others
22 involved with it ought to be careful about how they
23 consider possible error and uncertainty and so
24 forth.

02:04 25 In this case I came to this literature

02:04 1 after there was a substantial body of literature.

2 And so it's kind of a different circumstance.

3 Q. Okay. You came to this issue -- we're
4 talking about the issue of the McMullin case. Is
5 that correct?

6 A. Yes.

7 Q. And you came to this issue not through
8 intellectual interest but through being hired by
9 U.S. Smokeless Tobacco Company. Correct?

02:05 10 MR. BERNARDO: Objection to form.

11 A. I find it a very interesting literature
12 and case. I came to it because I was hired.

13 Q. (BY MR. SPOHRER) Okay. And is this the
14 first time you have done work on behalf of a tobacco
02:05 15 company?

16 A. Yes.

17 Q. How much have you been paid for your work
18 on this case?

19 A. To date I believe in the order of

02:05 20 \$20,000.

21 Q. Is that a possible source of bias as you
22 used the term previously?

23 A. No, that's not actually related to the use
24 of bias that I was -- that I used previously.

02:05 25 Q. Okay. How did you use the term "bias"

02:05 1 when you referred to it earlier?

2 A. I was referring to concepts sometimes
3 called systematic error. That's a synonym. Both of
4 those are terms of art in epidemiology referring to
02:06 5 possible ways in which the observed effect measure,
6 something like an odds ratio and so forth, might
7 deviate from a true underlying causal relationship.

8 The word "bias" or "systematic error" is
9 typically used to draw contrast versus look, it's
02:06 10 called random error or random sampling error, which
11 has different properties.

12 Q. So you are using the term "bias" as a term
13 of art for statisticians?

14 A. When I used it before, yes, every time
02:06 15 I've used it in this conversation I've used it way.

16 Q. Have you written any papers in which you
17 have found an association between any substances and
18 any of the disease processes that you have been
19 studying?

02:07 20 A. I'm not sure I understand the question.

21 Q. Okay. We discussed earlier that you have
22 done work at various times on heart disease, cancer,
23 the different types, stroke, fetal maternal health,
24 Type II diabetes, et cetera. Has any of your work
02:07 25 in those areas resulted in a finding on your part

02:07 1 that there is an epidemiological association between
2 any particular compounds or behaviors or substances
3 and those disease processes?

4 MR. BERNARDO: Objection to form.

02:07 5 A. Well, I should clarify that the
6 epidemiology I do -- again I'm not quite sure I
7 understand your question -- but the epidemiology I
8 do is not what gets called field epidemiology. And
9 most of the time when somebody uses the phrase
02:07 10 "found something," it refers to the result of a
11 field study. That is, somebody went out and
12 gathered new data and presented it.

13 I don't know if that's what you meant, but
14 if it was, that's not what I do. My specialty is
02:08 15 the part of the analysis that goes from -- that
16 starts with the data that somebody else has gathered
17 and proceeds there through interpretation and
18 decision making based on it.

19 Q. (BY MR. SPOHRER) Decision making as a
02:08 20 matter of public policy?

21 A. That's one of my areas of focus, yes.

22 Q. So you don't go out and gather data from
23 patients who are ill with Type II diabetes, for
24 example, or heart disease?

02:09 25 A. In the case of Type II diabetes, I

02:09 1 actually did a bit of field research. I wasn't
2 trying to say I've never done any field research.
3 That particular case was focused on patient
4 preferences, how patients reacted to different
02:09 5 treatment options, how they felt about them. And I
6 actually did sit in a clinic waiting room and
7 administer surveys to patients. So in that
8 particular case I did a bit of field research. I'm
9 not sure if that answers your question.

02:09 10 Q. Sure. With that exception, though, your
11 work is generally speaking not involved in gathering
12 data from individual patients, for example?

13 A. That's right. There is the additional
14 exception of paper that -- well, I'll let you decide
02:09 15 whether this is a yes or no to your question.

16 There is a paper that I'm working on right
17 now that one of my students invited me in on where
18 one of her students -- yes, my student has students
19 -- gathered some data as part of her training and
02:09 20 this is one on fetal maternal health. So I actually
21 have this data. So in some sense I'm pretty close
22 to the data gathering process.

23 On the other hand, again I was brought at
24 the level where my specialization kicks in after
02:10 25 someone had already gathered the data and it was

02:10 1 time to try to make sense of it.

2 Q. Do you believe there is a epidemiological
3 connection between smoking cigarettes and lung
4 cancer?

02:10 5 A. I'm not sure what you mean by
6 "epidemiologic connection." There is ample
7 evidence in the epidemiology literature that
8 associates smoking cigarettes with lung cancer, yes.

9 Q. Do you know what that SMR is?

02:10 10 A. I'm sorry?

11 Q. Are you familiar with the Standard
12 Mortality Ratio?

13 A. To some extent.

14 Q. Do you know what that is for that disease?

02:10 15 A. Not offhand, no.

16 Q. Do you know what the relative risk is?

17 MR. BERNARDO: Object to form.

18 A. I would have to look, look something up
19 before I felt comfortable answering that.

02:11 20 Q. (BY MR. SPOHRER) Okay. But as you sit
21 here today, you are satisfied that smoking
22 cigarettes is a cause of lung cancer?

23 A. Yes, I believe that.

24 Q. Okay. What is it about cigarette smoke
02:11 25 that causes lung cancer?

02:11 1 A. Well, that's a question that's better put
2 to a toxicologist or biochemist. I'm neither of
3 those. I'm not an expert in carcinogenesis. I base
4 my understanding of that relationship and my
02:11 5 conclusion on the epidemiologic data, which doesn't
6 contain that piece of information by its very
7 nature.

8 Q. Well, I understand it may not be your
9 primary focus of your research, but do you have an
02:11 10 understanding as to what it is about tobacco that
11 causes lung cancer?

12 MR. BERNARDO: Object to form.

13 A. I don't have a detailed enough
14 understanding of the carcinogenic process as it
02:12 15 relates to tobacco smoke that I would feel
16 comfortable saying I have a professional opinion on
17 it.

18 Q. (BY MR. SPOHRER) Okay. Are you familiar
19 with the term nitrosamines?

02:12 20 A. Yes.

21 Q. And tobacco specific nitrosamines?

22 A. Yes.

23 Q. And do you understand that it is tobacco
24 specific nitrosamines which are believed to be the
02:12 25 cause of lung cancer in smokers?

02:12 1 MR. BERNARDO: Object to form.

2 A. I know there is a literature in which
3 people have written that they believe that tobacco
4 specific nitrosamines lead to cancer. I'm aware
02:12 5 that that exists.

6 Q. (BY MR. SPOHRER) The products we're
7 involved with today are spit tobacco products such
8 as Skoal and Copenhagen. You are familiar with
9 that. Correct?

02:12 10 MR. BERNARDO: Object to form.

11 A. Yes, I know that we're talking about snuff
12 products which include Skoal and Copenhagen, yes.

13 Q. (BY MR. SPOHRER) Okay. Do Skoal and
14 Copenhagen contain tobacco specific nitrosamines?

02:13 15 A. I'm no expert on this. I have never done
16 a chemical analysis. I'm not a chemist.

17 I know that there is literature that says
18 that, that snuff, that moist snuff products, which
19 these are, contains those chemicals. And my
02:13 20 knowledge of that is simply based on having read it
21 in the sources that I just described.

22 Q. Okay. Well, do you have any reason to
23 doubt that the same tobacco specific nitrosamines
24 which are in both cigarettes and spit tobacco are
02:13 25 carcinogenic when put in the mouth instead of

02:13 1 smoked?

2 MR. BERNARDO: Object to form.

3 A. Do I have any reason to doubt? I actually
4 -- I don't understand the basis of several claims
02:14 5 that were implicit in that question. I'm not sure I
6 can answer it very effectively.

7 Q. (BY MR. SPOHRER) Okay. Fair enough.

8 Do you believe there are any adverse
9 health effects from use of spit tobacco?

02:14 10 A. My expertise in this matter has really
11 focused on one particular potential adverse health
12 effect, which is cancer of the mouth. And my review
13 of the literature shows that there is not evidence
14 in this epidemiologic literature supporting the
02:14 15 claim that snuff leads to oral cancer.

16 Q. So it is your opinion to be expressed at
17 the trial of this case that the use of moist
18 smokeless tobacco or spit tobacco such as Skoal and
19 Copenhagen does not lead to any cancers of the
02:15 20 mouth?

21 MR. BERNARDO: Object to form.

22 Q. (BY MR. SPOHRER) Do I understand that to
23 be your testimony?

24 A. The material that I studied relates to the
02:15 25 specific cancer sites of the mouth and with an

02:15 1 emphasis on the tongue.

2 And my conclusion based on that literature
3 is that there is no evidence that these products
4 lead to cancer of the tongue.

02:15 5 In fact, there is a fair amount of
6 evidence pointing to the conclusion that they do not
7 lead to cancer of the tongue. Further, there is --
8 the epidemiologic evidence does not establish that
9 there is any link to oral cancer more generally.

02:15 10 I believe you asked about cancer as a
11 broad category of many different diseases at many
12 different sites and I can't really speak to that.
13 My review of the literature has focused on these
14 particular sites.

02:16 15 Q. Okay. So do you believe that the use of
16 spit tobacco has any adverse health effects for the
17 user?

18 MR. BERNARDO: Object to form.

19 A. The material that I have studied, which
02:16 20 again is focused on those particular cancers and has
21 had, you know, has perhaps occasionally mentioned
22 other illnesses has not presented a picture to me of
23 any specific morbidity state that results from this
24 exposure.

02:16 25 However, I can't conclude from not having

02:16 1 seen it that it's not there. I haven't sat out to
2 make a general study of all possible health
3 consequences of this exposure.

4 Q. (BY MR. SPOHRER) What did you set out to
5 do?

6 A. I set out to form an opinion about whether
7 smokeless tobacco is -- has a causal association
8 with oral cancer in general and with tongue cancer
9 in specific.

02:17 10 Q. Okay. And you concluded that it does not?

11 A. I have concluded that, again with respect
12 to tongue cancer, there is no evidence that it
13 does. And furthermore, there is evidence that
14 supports the claim that there is no causal
02:17 15 association.

16 With respect to oral cancer more
17 generally, the body of evidence, the weight of
18 evidence, epidemiologic evidence -- I should clarify
19 that's what I'm talking about when I talk about the
02:17 20 literature I've read. The epidemiologic evidence
21 taken as a whole does not support the conclusion
22 that there is a causal relationship with oral
23 cancer.

24 Q. In general?

02:18 25 A. In general.

02:18 1 Q. Okay. What about other health effects
2 such as gingival recession, gum disease, anything
3 like that?

4 MR. BERNARDO: Object to form.

02:18 5 A. I haven't set out to form an opinion about
6 those relationships. I have seen mention of them,
7 of course, in the literature that I have reviewed.
8 I haven't studied it in a way that would allow me to
9 draw a conclusion one way or another.

02:18 10 Q. (BY MR. SPOHRER) Okay. As part of your
11 work in this case, you have reviewed the reports of
12 the Surgeon General of the United States?

13 A. The 1986 Surgeon General's report on this
14 topic, yes.

02:18 15 Q. Is that the only one you have read?

16 A. I believe so. I have looked at another
17 NIH work that came out in the early '90s, I believe,
18 but I don't think that was considered a Surgeon
19 General's report.

02:19 20 Q. Okay. Have you read the 2000 report on
21 oral health in America from the Surgeon General?

22 A. No, I have not read that.

23 Q. Do you know that the reports of the U.S.
24 Public Health Service and the Surgeon General are
02:19 25 based upon advisory committees made up of

02:19 1 internationally prominent physicians and
2 scientists?

3 MR. BERNARDO: Object to form.

4 A. I know that these reports are prepared by
02:19 5 panels of scientists, yes.

6 Q. (BY MR. SPOHRER) Do you know some of
7 those scientists?

8 A. It would depend on the report.

9 Q. In going through this material and
02:19 10 preparing for your testimony in this case, did you
11 read through the list of physicians and scientists
12 who participated in the reports?

13 A. Yes.

14 Q. Okay. Did you know any of them?

02:19 15 A. Yes.

16 Q. How many of them did you know?

17 A. I didn't attempt to memorize that number.
18 I'm not -- could not give you an answer.

19 Q. Did you know a significant number of
02:20 20 them?

21 MR. BERNARDO: Object to form.

22 A. I don't know what you mean by "significant
23 number." Again, if you showed me the list, I could
24 count or I could tell you which specific ones, but I
02:20 25 simply didn't try to memorize the list.

02:20 1 Q. (BY MR. SPOHRER) Let me ask you this. Do
2 you have any reason to question the intellectual
3 integrity or the scientific integrity of the men and
4 women who have advised the National Institutes of
02:20 5 Health on the health effects of oral tobacco?

6 MR. BERNARDO: Object to form.

7 A. Well, I'm not sure how I could comment on
8 the intellectual integrity of people, most of whom I
9 haven't met. So I really can't answer that.

02:20 10 Q. (BY MR. SPOHRER). Well, of the people on
11 the list who you did know, did you have any reason
12 to doubt their integrity?

13 A. I guess I don't really quite understand
14 what you are getting at in terms of doubting their
02:21 15 integrity.

16 Q. Well, let's start with their ability. Are
17 these men and women who have the ability to make the
18 scientific and medical judgments which are embodied
19 in the reports of the Surgeon General?

02:21 20 A. Well, that would depend on who you are
21 talking about and which report. This is getting,
22 getting a little abstract. If you have -- if there
23 is a specific individual that you are interested in
24 and a specific finding, I could try to comment on
02:21 25 what I know about their expertise, but I'm not sure

02:21 1 what I can do with the general question when you are
2 asking about all of them and all of the information
3 contained in the report.

4 Q. Well, let's just -- let's broaden it
02:21 5 rather than narrow it and ask you if you believe
6 that the Surgeon General of the United States has
7 any interest other than learning the science and
8 medicine as it relates to this product and
9 disseminating that information to the people of the
02:22 10 United States?

11 MR. BERNARDO: Objection to form.

12 A. I'm really no expert in the motives of the
13 Surgeon General. That would be a better call for a
14 political historian, I suppose.

02:22 15 Q. (BY MR. SPOHRER) Do you -- when you read
16 the reports, obviously, you disagree with the
17 conclusion of the Surgeon General's reports that the
18 use of oral tobacco is associated with cancer of the
19 mouth?

02:22 20 MR. BERNARDO: Object to form.

21 Q. (BY MR. SPOHRER) Do you disagree with
22 that?

23 A. Well, you are referring to reports in the
24 plural. As I mentioned, I had reviewed the 1986
02:22 25 report.

02:22 1 The important thing to keep in mind when
2 you are talking about that report is that it was
3 written in 1986, perhaps part in 1985, based on the
4 knowledge base that existed then. By which I mean
02:23 5 the information about oral cancer and smokeless
6 tobacco that existed then and about the scientific
7 knowledge and methodology of epidemiology as it
8 existed then.

9 And while it may not sound all that long
02:23 10 ago that this was done say 17, 16 years ago,
11 epidemiology is a relatively young field and there
12 have been substantial advances since then. The
13 total body of research on the topic at hand has more
14 than doubled since that time.

02:23 15 So when I reach a conclusion based on more
16 modern epidemiology and a better collection of data
17 in 2002, I'm not the inclined to jump up and say, I
18 disagree, somebody was wrong, but rather, to say
19 that this is the best that I can conclude here and
02:24 20 now with what I have to work with.

21 And I have no idea what conclusion I would
22 have reached in 1986 given the limitations of trying
23 to draw a conclusion then. And so to say whether a
24 disagreement or not is I think a little difficult
02:24 25 for me.

02:24 1 Q. Let's be specific then.

2 Do you want some more coffee?

3 A. Please.

4 Q. Maybe Mr. Bernardo?

02:24 5 A. I'm sorry.

6 MR. BERNARDO: Why don't we go off
7 the record just a minute.

8 THE VIDEOGRAPHER: Go off the
9 record?

10 MR. SPOHRER: Sure.

11 THE VIDEOGRAPHER: Time is 2:25 going
12 off the record.

13 (Pause from 2:25 to 2:26 p.m.)

14 THE VIDEOGRAPHER: Time is 2:26,
02:26 15 we're on the record.

16 Q. (BY MR. SPOHRER) Doctor, during the break
17 I pulled your copy of the 1986 report of the Surgeon
18 General on the health consequences of using
19 smokeless tobacco. And turning to page Roman
02:26 20 numeral X is a list of the acknowledgments of the
men and women who contributed to this report with
21 regard to carcinogenesis or development of cancer.
22 So you can take a look at those. They are on the
23 left hand page.

02:26 25 A. Okay.

02:26 1 Q. Now that you have had a chance to look at
2 those, first of all, do you know any of those
3 people?

4 A. The, I guess I have met two of them
02:26 5 personally and I am generally aware of one other.

6 Q. Who do you know know personally? Who have
7 you met?

8 A. Well, one of them who I met personally but
9 it isn't actually terribly relevant to this is Steve
02:27 10 Tannenbaum who I happened to meet through social
11 connections when I was living in Massachusetts and
12 have never had a technical discussion with him but
13 I've met him.

14 Ken Rothman is an epidemiologist who's now
02:27 15 at Boston who I had the opportunity to sit down with
16 and talk to for a few hours a year and a half ago or
17 so, maybe two years ago.

18 Q. Dr. Dietrich Hoffman, do you know him?

19 A. No, I don't.

02:27 20 Q. Looking at the list of those people, do
21 you have any reason to doubt the scientific
22 integrity of those people?

23 MR. BERNARDO: Objection as to form.

24 A. I don't really have a strong reason to
02:27 25 form a conclusion one way or another, other than

02:27 1 what you might conclude about any name on a page.

2 Q. (BY MR. SPOHRER) Well, I mean do you
3 believe that these are men and women motivated by
4 anything other than trying to learn the scientific
02:28 5 truth and report on it to the government?

6 MR. BERNARDO: Object to form. Bob,
7 you can ask a question, but you can't ask the same
8 one 12 times. He can answer it, but --

9 MR. SPOHRER: I think I can until I
02:28 10 get an answer.

11 MR. BERNARDO: I think he's answered
12 several times he doesn't know these people. He
13 can't form an opinion about people he doesn't know.
14 You can ask him the same question many more times,
02:28 15 but you will probably get the same answer, but go
16 ahead.

17 A. I'm sorry. What was the question?

18 Q. (BY MR. SPOHRER) Do you believe that
19 these people are biased in their reporting?

02:28 20 MR. BERNARDO: Object to form.

21 A. Well, we had a discussion about exactly
22 what bias means before and I realize --

23 Q. I'm using it in your term. I'm using it
24 in the sense of bias meaning these people have some
02:28 25 motivation to report on something other than the

02:28 1 truth as they believe it to exist?

2 MR. BERNARDO: Same objection.

3 A. I can't comment on either their motives or
4 what might lead them to the truth as they believe it
02:28 5 to exist so I really couldn't tell you.

6 Q. (BY MR. SPOHRER) Now, the boxes of
7 material that you brought to this deposition are the
8 materials that you reviewed in arriving at your
9 opinions. Correct?

02:29 10 A. That's right.

11 Q. Where did you get this stuff?

12 A. From a combination of sources. Some of it
13 was provided to me by counsel, Mr. Bernardo and --
14 usually and others. Some of it was my own research
02:29 15 and some of it was the research of my research
16 assistant under my direction.

17 Q. And how much of it was provided to you by
18 counsel for the tobacco company?

19 A. In terms of total numbers of pieces of
02:29 20 paper, which is the only way I can see to answer
21 that question, most of it.

22 I would say if you count the entire
23 collection of material from when that would be 90
24 percent of the total pieces of paper.

02:30 25 Q. But you were not provided with the report

02:30 1 of the Surgeon General on oral health in America
2 dated 2000?

3 A. I have not seen that.

4 Q. Would you like to see it?

02:30 5 A. Eventually, I suppose I will read that in
6 my life.

7 Q. Well, I mean you said earlier that the
8 work of the Surgeon General was dated because it was
9 1986 data or earlier. Correct?

02:30 10 A. I said that the 1986 report of the group
11 assembled by the Surgeon General had that
12 characteristic, yes.

13 Q. And you have not, however, seen fit to get
14 the 2000 report or have asked counsel to provide it
02:30 15 for you?

16 MR. BERNARDO: Object to form.

17 A. I have done research on the available
18 literature and found what I thought would contribute
19 to my knowledge about this topic.

02:31 20 I have had a research assistant spend many
21 more hours even still than that to reach that
22 conclusion. If one of us came across this document
23 in our research, we for whatever reason chose not to
24 -- not to add it to my file. I can't really
02:31 25 speculate as to why without reading it.

02:31 1 If you implicitly offer to let me read it,
2 I can sit here and read it, if you want, and then
3 try to better tell you what it's implications are
4 for my opinion.

02:31 5 Q. (BY MR. SPOHRER) Well, let me just read
6 to you from page 259 of the report.

7 "Smokeless spit tobacco: These products
8 are causally linked to oral and pharyngeal cancers.
9 About 30 carcinogens have been found in spit tobacco
02:31 10 including tobacco specific N-nitrosamines, benzo
11 [alpha] pyrene and formaldehyde. Spit tobacco users
12 have an oral cancer risk four to six times that of
13 non-users."

14 MR. BERNARDO: Object to form. Is
02:32 15 there a question there?

16 Q. (BY MR. SPOHRER) Do you agree with any of
17 those statements in the 2000 report?

18 A. Where am I reading?

19 Q. The highlighted portion.

02:32 20 A. Well, it's worth, when looking at this
21 reading, the references which you didn't read,
22 smokeless spit tobacco are the first words as a
23 heading, not a sentence.

Then it says these products are causally linked to oral and pharyngeal cancers. Then in

02:33 1 parenthesis the references are IARC 1985, Nash (sic)
2 1986 and U.S. DHHS 1986. Nash is a paper I'm not
3 sure I'm familiar with.

4 But the other two sources, the latter one
02:33 5 was the 1986 report that I was just talking about.
6 The former is a European equivalent of the same
7 report that came out actually a year earlier and so
8 was based on material a year earlier still.

9 And so basically, this is material from
02:33 10 the -- as far as I can tell from looking at that
11 sentence, that sentence is just material from the
12 1986 report that I was already commenting on.
13 Perhaps that's why if I came across this paper I
14 decided it didn't actually add anything to.

02:34 15 Q. Do you see the reference to the study on
16 the 30 carcinogens identified in spit tobacco?
17 What's the date of that reference?

18 A. That's Hoffman and Djordjevic, I probably
19 pronounced that wrong, 1997.

02:34 20 Q. Have you considered that work?

21 A. It has the word "carcinogen" in it.
22 That's part of the language of the field of
23 toxicology which looks at things somewhat
24 differently. I may have actually seen this paper.

02:34 25 It may actually be in my file there. I have a

02:34 1 couple of papers that those are authors of. So yes,
2 I may well have seen that paper.

3 It's important to note that if it is
4 toxicology, as it seems to be, and I believe those
02:34 5 individuals are toxicologists, my review of it was
6 for purposes of gaining background information from
7 experts in another field and was really not part of
8 something that I felt I could derive an opinion
9 about myself.

02:35 10 Q. So you reject or you accept the findings
11 of Dr. Hoffman and his colleagues in 1996 that there
12 are 30 cancer causing agents in spit tobacco?

13 MR. BERNARDO: Objection to form.

14 A. Neither of those, actually. I'm in no
02:35 15 position to either accept or reject their
16 conclusion.

17 Q. (BY MR. SPOHRER) Well, if we accept it
18 since Dr. Hoffman is a an internationally famous
19 pioneer in tobacco chemistry, what does that tell
02:35 20 you about the carcinogenicity of spit tobacco?

21 MR. BERNARDO: Objection to form.

22 A. I don't actually know anything about
23 whether -- what Dr. Hoffman's level of fame is in
24 that field. Again, it's not really my field. So
02:36 25 I'm not sure that I can answer a question that's

02:36 1 based on that characterization.

2 Q. (BY MR. SPOHRER) Do you know if there are
3 any carcinogens in spit tobacco?

4 MR. BERNARDO: Objection to form.

02:36 5 A. Again to note whether something is a
6 carcinogen or not is a study that comes out of the
7 field of toxicology, that is -- which is a field
8 where typically individual chemicals are isolated,
9 processed in various ways, put into various
02:36 10 solutions and then they are exposed to cell lines or
11 animals.

12 My area of expertise is epidemiology in
13 which I'm not so interested in what happens with an
14 isolated chemical and a substitute for an actual
02:36 15 human but rather, what happens when there is a real
16 life exposure and in terms of whether an actual
17 human gets a disease.

18 So the question of whether there are
19 carcinogens in it or not is something that other
02:37 20 people draw conclusions about and is something that
21 is an intermediate step of some sort perhaps that
22 doesn't actually show up in the science that I do.

23 Q. (BY MR. SPOHRER) You are familiar with
24 IARC?

02:37 25 A. Yes.

02:37 1 Q. What is that?

2 A. Stands for International Agency for
3 Research on Cancer. It's a European research,
4 obviously, group that looks into cancer. It is in
02:37 5 some rough sense similar to a Surgeon General or NCI
6 type operation.

7 Q. Okay. What is the position of the IARC on
8 spit tobacco and its safety?

9 MR. BERNARDO: Object to form.

02:37 10 A. I'm aware of the content of their 1985
11 report. I don't know whether that represents their
12 position in the present tense or even whether it's
13 the right way to describe an IARC monograph as being
14 the position of the agency. I am familiar with that
02:38 15 document. That's all I can really say about what
16 IARC has had to say about this matter.

17 Q. (BY MR. SPOHRER) You don't have their
18 recent list of carcinogens?

19 MR. BERNARDO: Object to form.

02:38 20 A. No; I'm not sure quite what you are
21 talking about, but I don't have in my possession an
22 IARC document that lists carcinogens, no.

23 Q. (BY MR. SPOHRER) Do you have reason to
24 question the science of the men and women who
02:38 25 contribute to the IARC position papers?

02:38 1 MR. BERNARDO: Object to form.

2 A. I think it's similar to what I had to say
3 about the individuals listed on this page --

4 Q. (BY MR. SPOHRER) You don't know?

02:38 5 A. -- which is that I don't -- I don't know
6 who they are offhand, all of them. I don't know
7 anything about some of them and I don't know enough
8 about the others to draw conclusions like that about
9 their -- about their psychology.

02:39 10 Q. The World Health Organization, you are
11 familiar with that body?

12 A. Sure.

13 Q. And are you familiar with their position
14 with respect to the hazards of using spit tobacco?

02:39 15 MR. BERNARDO: Object to form.

16 A. I don't know exactly what their position
17 is, no.

18 Q. (BY MR. SPOHRER) Well, let me just tell
19 you that their position is that the use of spit
02:39 20 tobacco causes cancer of the mouth. Do you have any
21 reason to doubt that the World Health Organization
22 has a motivation to do anything other than try to
23 improve the safety and the health of the people of
24 the world?

02:39 25 MR. BERNARDO: Object to form.

02:39 1 A. I'm not quite sure what document or report
2 that you are basing that characterization of their
3 position on so I can't really comment on that.

4 My answer to the question is again back to
02:40 5 my point about not being able to say much about the
6 psychology or other motivations for these people
7 involved. That's just simply not something I have
8 studied, not something I know. I don't know who
9 does know it.

02:40 10 Q. (BY MR. SPOHRER) Dr. Phillips, can you
11 name for me one scientific or medical organization
12 which agrees with your conclusion that the use of
13 spit tobacco is not related to oral cancer?

14 MR. BERNARDO: Object to form.

02:40 15 A. I don't know that to be the official
16 position of any scientific body, no.

17 Q. (BY MR. SPOHRER) So your answer is none?

18 MR. BERNARDO: Object to form.

19 That's not what he said.

02:41 20 A. I'd have to recall exactly how you phrased
21 the question to decide if my answer is actually
22 none.

23 Q. (BY MR. SPOHRER) I'm happy to rephrase it
24 for you. Can you name any organizations which are
02:41 25 composed of reputable scientists or physicians which

02:41 1 agree with you that there is no relationship between
2 the use of spit tobacco and oral cancer?

3 MR. BERNARDO: Object to form.

4 A. I'm not, as I sit here, offhand aware of
02:41 5 any organization that has a position -- actually, I
6 could probably end it there.

7 I really in all honesty don't know exactly
8 what the official position of any of these
9 organizations that you have referred to are. I know
02:42 10 the contents of the documents that they have
11 published. I have not made a study of single
12 sentence statements of, this is our position, so I
13 actually couldn't tell you what the position of any
14 organization is as a sound bite on this matter.

02:42 15 Q. (BY MR. SPOHRER) So you don't know -- I
16 mean you have charged \$20,000 for your work on this
17 case and you are unable to give me either the
18 position of any national or international medical
19 organization or the name of any such organization
02:42 20 which agrees with you. You just don't know as you
21 sit here today?

22 MR. BERNARDO: Object to form.

23 A. Could you repeat the question?

24 Q. (BY MR. SPOHRER) Sure. You have worked
02:42 25 and billed over \$20,000 to U.S. Smokeless Tobacco

02:42 1 for your work on this case, but even after all that
2 work, you are unable to tell me the position of any
3 medical or scientific organization on that
4 question? Is that what I understand you to be
02:43 5 saying?

6 MR. BERNARDO: Same objection.

7 A. Again, you seem to be focused on single
8 sentence sound bite type notions of an
9 organization's position. As a scientist, I don't
02:43 10 find those sound bites to be very useful for forming
11 my opinion for understanding the world for how
12 understanding how other people think.

13 If what you are trying to get at is are
14 there a lot of people in the health community out
02:43 15 there who think that smokeless tobacco causes oral
16 cancer, then the answer is yes. But -- and I'm
17 aware of that and people reach a lot of conclusions
18 for a lot of reasons.

19 I have reached a conclusion based on the
02:43 20 science and it's not influenced one way or another
21 by somebody's sound bite.

22 Q. (BY MR. SPOHRER) You have reached a
23 conclusion but not based on your science, based on
24 your review of other people's science. Is that
02:44 25 true?

02:44 1 MR. BERNARDO: Object to form.

2 A. Actually, it has been based on my
3 science. As I pointed out, my science, my portion
4 of this science is focused on the steps that take
02:44 5 you from data to conclusions and then sometimes from
6 conclusions to actions, although that's not
7 particularly relevant here.

8 As I pointed out, this is not based on any
9 of my own data gathering. I don't consider that to
02:44 10 be a problem at all. My work here has been about
11 interpreting the data that exists. And that is my
12 science.

13 Q. (BY MR. SPOHRER) You are a vegetarian and
14 have written extensively on your vegetarianism. Is
02:45 15 that based on health concerns or other concerns?

16 A. My behavior is based primarily on other
17 concerns. My writing has included issues relating
18 to health as well as other things.

19 Q. Okay. Can you tell me what your
02:45 20 recommendations would be to friends or family about
21 their use of tobacco products in general?

22 MR. BERNARDO: Object to form.

23 A. I'm not sure that there is such a thing as
24 tobacco products in general. So specifically --

02:45 25 Q. (BY MR. SPOHRER) Let's talk about

02:45 1 specifics then.

2 A. -- I advise people not to smoke
3 cigarettes, but on the other hand, I'm not sure I
4 would waste too much effort advising people not to
02:45 5 smoke cigarettes since there is really nothing I
6 could tell them that's not already widely known.

7 Q. How about -- I don't want to pry into your
8 personal life, but I don't know. Are you married?
9 Do you have children?

02:46 10 A. I'm not married and I don't have children.

11 Q. You have nieces, nephews, perhaps?

12 A. There are children I'm around.

13 Q. Young people that you are associated with?

14 A. My girlfriend has a 16 year-old son.

02:46 15 Q. Good. And that young man, does he use
16 tobacco products?

17 A. Not to my knowledge.

18 Q. If he were to come to you and ask, Carl,
19 I'm interested in using this product Skoal, spit
02:46 20 tobacco, what do you think? Would you encourage his
use of the product or discourage his use of the
21 product?
22

23 MR. BERNARDO: Object to form.

24 A. Well, I suppose my first thought would be,
02:46 25 I don't know if you had an opportunity to drive

02:46 1 around the roads when you are here in Houston, but
2 about every tenth billboard is a message from
3 someone, someone in law enforcement -- I'm not
4 actually sure who -- with this giant message that
02:47 5 says, if you are under 18, driving -- I forget the
6 exact wording -- but if you are under 18 driving and
7 have tobacco in your car, it's your license that
8 gets smoked, which I interpret to mean there are
9 very harsh penalties associated with underage
02:47 10 tobacco possession in Houston.

11 That, I think, would be sufficient for me
12 to not want him to get afoul with the law.

13 Q. (BY MR. SPOHRER) Fair enough. Let's
14 suppose it's his 18th birthday. And he comes to you
02:47 15 and says, Carl, same question, I'm interested in
16 this stuff Skoal, spit tobacco. What do you think?

17 MR. BERNARDO: Same objection.

18 Q. (BY MR. SPOHRER) Would you encourage his
19 use of it or discourage his use of it and why?

02:47 20 A. Well, there are various aspects of
21 consuming the product. I know that he is spending
22 my girlfriend's money, my money, I might discourage
23 him from embarking on a consumption pattern that
24 used money that indirectly in some sense I would be
02:48 25 providing him. So that would be one reason for me

02:48 1 to want to discourage him.

2 Q. Any others?

3 A. Probably. I am aware that many people
4 find it very unaesthetic to be around somebody who
02:48 5 is using. I say aware, but I don't have much
6 personal experience with that myself, but the social
7 implications of it might be important.

8 Q. Anything other than the cost of it and the
9 fact that it may be unpleasant to be around somebody
02:48 10 like that?

11 Would you have any health concerns that
12 you would communicate to this young man?

13 A. Based on what I know right now, having
14 studied the relationship of oral cancer, I would be
02:49 15 honest with him and say, I know that an awful lot of
16 people out there believe that it causes oral cancer,
17 but I don't think that's the case.

18 In terms of other health concerns, if we
19 really were having this conversation and he really
02:49 20 asked me, do you think there are other health
21 concerns, I would have to do some research that to
22 date I haven't done. I can't really answer that.

23 Q. Have you ever testified in a courtroom?

24 A. No.

02:49 25 Q. Have you ever given a deposition before

02:49 1 today?

2 A. No.

3 Q. Have you ever consulted in a litigation
4 matter of any type?

02:50 5 A. Yes.

6 Q. Tell me about it, please.

7 A. Well, I have done several. My first job
8 or my second job out of graduate school after the
9 first time I went to graduate school was for a
02:50 10 consulting firm called Law and Economics Consulting
11 Group in Berkley, California which specializes in
12 litigation support consulting. And I worked there
13 for about three years, and so was involved in
14 several cases. I could list as many of them as I
02:50 15 could remember, if you want.

16 Q. Well, would I be correct in assuming those
17 were cases involving some type of economic analysis,
18 financial analysis of some type?

19 A. Finance played a smaller role in most of
02:50 20 the work that I did. Finance is not really my --
21 has never been my area of expertise.

22 Most of them had to do with trade
23 practices, antitrust. I suppose you might call that
24 finance. There were a few others that dealt with
02:51 25 other matters. Basically, they all dealt with

02:51 1 economics in one form or another as you surmised.

2 Q. Let's put those aside and tell me what
3 other forensic experiences you have had.

4 A. Forensic?

02:51 5 MR. BERNARDO: Objection.

6 Q. (BY MR. SPOHRER) Relating to litigation
7 matters.

8 A. Okay. When I went back to graduate
9 school, I did a few consulting projects in
02:51 10 conjunction with my adviser at school. One of the
11 projects that we worked on, we had a very small role
12 in the litigation surrounding the Exxon Valdez
13 spill. So I guess that was litigation.

14 Q. That was on behalf of whom?

02:51 15 A. That was roughly, roughly speaking on
16 behalf of Exxon. We were working for -- as far as I
17 could tell, we were working for people who were
18 working for people who were working for Exxon. I
19 wasn't exactly privy to the exact details of that.

02:52 20 Q. Would it be a simplification of what you
21 did that you were involved in the calculation of the
22 damages of the cleanup, the spill, that type of
23 thing?

24 A. It was related to that. It had more to do
02:52 25 with talking about the methods by which the

02:52 1 calculation was done rather than actually doing the
2 calculation, but yes.

3 Q. Okay. What other cases?

4 A. I worked after graduation, I believe this
02:52 5 was mostly during my post doc, I worked on a case
6 where a hospital phlebotomist contract HIV as a
7 result of a needle stick and she was suing the
8 device manufacturer.

9 Q. Okay. What was your role in that?

02:53 10 A. I was working for plaintiff's counsel as,
11 I think you call it, a consulting expert, not a
12 testifying expert.

13 Q. Calculating the risk of her contracting?

14 A. It involved calculating the, right, the
02:53 15 aggregate risk of someone getting a needle stick,
16 getting this disease as a result, how many of these
17 products were sold, what the chances that somebody
18 is going to have this experience are given that,
19 that type of analysis, yes.

02:53 20 Q. Okay. Any other cases?

21 A. I had a small involvement -- again this
22 was a few years ago -- in a case having to do with
23 -- I don't know what you would call it, racism, I
24 suppose, an allegation of racism against an
insurance company in writing policies.

02:54 1 Q. What was the insurance company?

2 A. I believe it was Nationwide.

3 Q. And in writing life insurance policies?

4 A. It was -- the piece of statistical
02:54 5 analysis that I did actually had to do with, I
6 believe, homeowners' insurance policies. I think
7 there might have been allegations that had to do
8 with other insurance instruments too, but that
9 wasn't my role in it.

02:54 10 Q. You were working on behalf of Nationwide
11 Insurance?

12 A. I believe I was working for their
13 underwriter. Again, I was working for lawyers and I
14 believe they were actually working for the liability
02:55 15 insurer of Nationwide rather than Nationwide. I
16 won't swear to that.

17 Q. Okay. But it was your work in general --
18 again this is an over-simplification -- that you
19 were doing a statistical or a mathematical analysis
02:55 20 as to whether or not the company, in fact, had been
21 using race as a determinant for writing homeowners'
22 policies?

23 MR. BERNARDO: Objection to form.

24 A. My role was, yes, in the form of

02:55 25 statistical analysis looking at data trying to make

02:55 1 sense of data on behalf of somebody related to the
2 defendant with respect to that allegation, yes.

3 Q. (BY MR. SPOHRER) Would it be fair to say
4 that you concluded from your analysis that they were
02:55 5 not using race in writing those policies?

6 MR. BERNARDO: Objection to form.

7 A. Actually, I don't recall that my role
8 called for a conclusion and to my recollection, I
9 don't think I offered one. I did the analysis. I
02:56 10 reported what the numbers showed to them.

11 Q. (BY MR. SPOHRER) Any other litigation?

12 A. I'm trying -- recalling offhand, I think
13 that's all of the litigation consulting that I have
14 been involved in. Again, pointing out that the law
02:56 15 and economics role was numerous cases and so that
16 plus the specific ones that we just discussed.

17 MR. SPOHRER: Okay. Why don't we
18 take a break?

19 THE VIDEOGRAPHER: The time is 2:57,
02:57 20 going off the record.

21 (Pause from 2:57 to 3:19 p.m.)

22 THE VIDEOGRAPHER: The time is 3:19,
23 we're on the record.

24 (Phillips Exhibit No. 1 marked.)

03:19 25 Q. (BY MR. SPOHRER) Sir, we have attached as

03:19 1 Exhibit 1 to this deposition a copy of your
2 handwritten notes which you have in front of you
3 there. Where are these, please?

4 A. That would be this?

03:19 5 Q. Yes.

6 A. These three pages, this is separate, but
7 the three pages were notes that I prepared sitting
8 in a hotel room in New York on the occasion of my
9 first visit to New York.

03:19 10 I had been asked by counsel to give a
11 little 51 spiel on what is epidemiology, how it
12 relates to drawing conclusions about the matter at
13 hand, what my conclusions were based on my review of
14 that literature and so forth.

03:20 15 Q. Okay. Who were you giving those remarks
16 to?

17 A. It was a gentleman here, Mr. Bernardo,
18 Mr. Kuhlman, Chris Cox from the Skadden firm. Peter
19 McKenna from the Skadden firm. Someone from the
03:20 20 general counsel's office at U.S.T., Beth somebody.
21 I'm afraid I don't remember her last name. I think
22 there were maybe one or two other people. I don't
23 quite remember who they were.

24 Q. And how long did that meeting last?

03:20 25 A. That particular meeting with all of those

03:20 1 individuals, I'm guessing an hour and a half. I'm
2 not positive of that.

3 Q. How many times have you been to New York
4 on this case?

03:20 5 A. Three.

6 Q. They fly you out there first class each
7 time?

8 A. No, I flew coach each time.

9 Q. Why?

03:21 10 A. Pardon me?

11 Q. Why?

12 MR. BERNARDO: Objection to form.

13 A. That's what I do.

14 Q. (BY MR. SPOHRER) Hold out for first
03:21 15 class. That's what Byers gets.

16 MR. BERNARDO: Move to strike.

17 Q. (BY MR. SPOHRER) Has anybody removed
18 anything from your files, sir?

19 MR. BERNARDO: Objection to form.

03:21 20 A. The file has been here overnight. I
21 couldn't tell you. I haven't looked through it this
22 morning.

23 Q. (BY MR. SPOHRER) But as of the time that
24 you brought it here and went through it with
03:21 25 counsel, nobody has said, let's take this out of

03:21 1 your file, or you haven't removed anything from your
2 file?

3 MR. BERNARDO: Objection to form.

4 A. That's right.

03:21 5 Q. (BY MR. SPOHRER) Okay. Do you have any
6 other -- any reports that you have written in this
7 case?

8 A. No. There is the one report which was
9 included in there, which I see has a sticker on it
03:21 10 right there.

11 Q. On your analysis of the Winn?

12 A. Yes, I'm actually told that report is a
13 term of art in your world and that that's not a
14 report, but I don't quite know what that means.

03:22 15 Q. Is there any other writing that you have
16 made to anyone in this case other than the
17 handwritten notes which we are looking at here which
18 is Exhibit 1, or this background and sample size is
19 the title of this document which is Exhibit 2
20 (Phillips Exhibit No. 2 marked.)

21 A. That's right. And I should clarify that
22 these handwritten notes were not distributed. They
23 were notes I wrote for myself and read from.

24 Q. Okay.

03:22 25 A. There are other handwritten notes in

03:22 1 amongst my materials. Again, those were by me for
2 me.

3 Q. We had asked that you bring certain
4 materials to this deposition. Included are two
03:22 5 articles that you wrote, one on screening
6 mammography cost effectiveness analysis and one on
7 extremely low birth weight survivors. Do you have
8 those?

9 A. I should clarify those entries from my CV
03:22 10 were pulled out of the section of my CV, which I
11 call something along the lines of other
12 collaborations in progress and I specifically noted
13 in the heading for that those are collaborations
14 that aren't represented by any of the working papers
03:23 15 or other written material. Those are not papers but
16 rather descriptions of ongoing discussions.

17 Q. Ongoing discussions with whom?

18 A. The -- could you remind me of what the two
19 of the three are?

03:23 20 Q. The first is called "Screening Mammography
21 Cost Effectiveness Analysis using SEER Medicare data
22 with Begley et al."

23 MR. BERNARDO: Bob, if you wouldn't
24 mind just giving him a copy of the CV just to refer
03:23 25 to. Do you have --

03:23 1 A. I don't have my own copy.

2 MR. BERNARDO: There is one in the
3 box.

4 Q. (BY MR. SPOHRER) There you go.

03:23 5 A. Yes. The entry that you are talking about
6 to get the exact answer to my previous statement,
7 these come from the category last on my CV, other
8 ongoing projects and collaborations [excludes
9 working papers and recent presentations/abstracts
03:24 10 previously listed.]

11 The one in question, Chuck Begley is a
12 colleague of mine, senior colleague of mine at the
13 School of Public Health. He's the one who is
14 running this collaboration. Others involved in it
03:24 15 are Dave Larasen, Mike Swent, Willie Safrancini
16 (sic), other colleagues at the School of Public
17 Health.

18 Q. Is there any report or writing that has
19 been developed by you or your colleagues with regard
03:24 20 to that research?

21 A. No, not yet.

22 Q. The second one is extremely low birth
23 weight survivors, life cycle cost utility analysis
24 with Tyson et al. What is that?

03:25 25 A. Again, it's a collaboration in progress.

03:25 1 That one is at a much earlier stage at this point.
2 John Tyson is a colleague of mine who is on the
3 faculty at the U.T. medical school.

4 Q. Thank you. Go ahead.

03:25 5 A. He is a neonatologist along with several
6 of his colleagues and we were discussing the
7 possibility of, as you can see, doing a life cycle
8 cost utility analysis. This discussion got
9 temporarily set aside as we all became too busy and
03:25 10 he and some of his colleagues put in a grant
11 proposal for some of the more clinical side of it
12 already and we're going to revisit what I have
13 written here or we intend to revisit what I have
14 written here in a few months when we're --

03:25 15 Q. Well, what have you written on that
16 subject?

17 A. Nothing.

18 Q. Then the revisiting shouldn't take too
19 long.

03:26 20 MR. BERNARDO: Objection to form.

21 Q. (BY MR. SPOHRER) You said you were going
22 to revisit what you have written here. What -- have
23 you done any --

24 A. By written, I mean what I have described
03:26 25 in the CV, the phrase there, we're going to revisit

03:26 1 the project life cycle cost utility analysis.

2 That's what I meant when I said revisit.

3 Q. So I gather from that study as well there
4 is no draft report or anything that has been
03:26 5 prepared yet?

6 A. That's right.

7 Q. Okay. Do I understand from the title of
8 that subject that the study is basically on
9 determining the cost utility analysis of, well, you
03:26 10 tell me. What does that, to a layman, what does
11 that research involve?

12 A. Sure. As I said Dr. Tyson and his
13 colleagues there are clinicians, faculty clinicians
14 at the medical school. They work in neonatology,
03:26 15 which is the clinical area of taking care of babies
16 in distress most of which -- most of whom are low
17 birth weight. Then there are specific technical
18 terms, very low birth weight, extremely low birth
19 weight, that describe particular weight ranges.

03:27 20 He is interested in -- he and his
21 colleagues have long been interested in what happens
22 to these kids or these people as they progress
23 through childhood, assuming they survive. These are
24 individuals who often, unfortunately, die in the
03:27 25 hospital before they go home. But he's interested

03:27 1 in what happens to the ones who go home in terms of
2 how their life is given that they very frequently
3 have physical and mental handicaps as a result of
4 their early life experience.

03:27 5 Q. And the goal is to assemble some data so
6 that one can make a determination as to the -- as
7 described here, the cost utility analysis of
8 resuscitation?

9 A. Nothing about resuscitation specifically
03:28 10 that the -- I should say that the clinical expertise
11 in this case is not mine. That is, I don't -- I
12 can't say exactly what these actions are that are
13 taken in the NICU, the neonatal intensive care
14 unit. I have never actually set foot there.

03:28 15 So I really can't characterize how they
16 would describe it. We're talking, of course, about
17 the care that they receive. And the questions arise
18 in terms of some general points and some specifics.
19 There are instances, again the clinical information
03:28 20 is based on what they have told me, where there is a
21 choice of two treatments or a choice of doing a
22 treatment or not.

23 And it's a tradeoff because if they do the
24 treatment they, for example, increase the chance of
03:28 25 blindness but also increase the chance of survival.

03:29 1 That was a hypothetical. I'm not sure I can
2 identify specific treatment that did that, but they
3 face a lot of decisions like that.

4 And there is not nearly enough data about
03:29 5 what the better choice would be, given what happens
6 years out. And of course it's, you know, as you
7 might guess, terribly distressing to be a clinician
8 making these decisions and not having access to
9 studies where you actually figure out the
03:29 10 ramifications of your decision.

11 Q. All right. Thank you.

12 We have asked for presentations given by
13 you at which you were present relating to the
14 subject matter of your opinions in this case and I
03:29 15 gather the answer is none?

16 A. Correct.

17 Q. You have done no independent research or
18 research on this subject of the safety of spit
19 tobacco other than when you have been commissioned
03:29 20 to do by the United States Smokeless Tobacco
21 Company?

22 MR. BERNARDO: Object to form.

23 A. I have done -- I have done the research
24 that I described. I have not written my papers
03:30 25 about it.

03:30 1 Q. (BY MR. SPOHRER) Let me be clear. In
2 other words, prior to your engagement by U.S.
3 Smokeless Tobacco Company's lawyers, you had no
4 interest in this subject?

03:30 5 MR. BERNARDO: Object to form.

6 A. I wouldn't say I had no interest in it. I
7 hadn't done research in it before.

8 Q. (BY MR. SPOHRER) Did you know what spit
9 tobacco was before you were hired in this case?

03:30 10 MR. BERNARDO: Object to form.

11 A. I was aware of the existence of the
12 smokeless tobacco products.

13 Q. (BY MR. SPOHRER) My point is simply, you
14 didn't come to do this research because of

03:30 15 intellectual curiosity. You are doing it because
16 you were hired and given a specific project to work
17 on by this company?

18 MR. BERNARDO: Object to form.

19 A. I find this topic to actually be
03:30 20 intellectually fascinating, however, some of the
21 work that -- some of the reading that I have done
22 along the way you might choose to characterize as a
23 pursuant of intellectual interest at that stage.

24 If the question is had I done any work on
03:31 25 this before I was approached by counsel for U.S.T.,

03:31 1 the answer is no.

2 Q. (BY MR. SPOHRER) Okay. Have you
3 submitted any bills for your work on this case?

4 A. Yes.

03:31 5 Q. Do you have those here today?

6 A. No.

7 Q. Where are they?

8 A. The actual bills that I submitted are in
9 New York, presumably. I have the files, the
03:31 10 computer files that I used to create them are on my
11 computer.

12 Q. Okay. Would you send to me or through
13 counsel to me a copy of any invoices or billing
14 information that you have submitted on this case?

03:31 15 A. Sure.

16 MR. BERNARDO: I would object to that
17 request, Bob, as being outside the scope of the
18 rules, but we can talk about that.

19 MR. SPOHRER: It is subject of our
03:32 20 request to produce.

21 MR. BERNARDO: That doesn't make it
22 within the scope of the rules.

23 A. Let me clarify my last answer. If counsel
24 instructs me to go ahead and do that, I will do it.

03:32 25 Q. (BY MR. SPOHRER) What percentage of your

03:32 1 income over the last 36 months has been derived from
2 serving as an expert in litigation matters?

3 A. Something in the order of five percent or
4 a bit more.

03:32 5 Q. Or a bit more? For a statistician that
6 seems hopelessly vague to me. Can you give me a
7 percentage --

8 MR. BERNARDO: Objection to form.

9 Q. -- of your income over the last 36 months
03:32 10 by serving as an expert in litigation matters?

11 MR. BERNARDO: Objection to form.

12 A. If you want it to significant figures, I
13 can sit here and calculate it, but --

14 Q. (BY MR. SPOHRER) It's just that your
03:32 15 answer was pregnant with the possibility that it's
16 quite a bit more than five percent.

17 MR. BERNARDO: Object to form.

18 Q. (BY MR. SPOHRER) But if you think it's
19 five percent, you know give or take, then I'll take
03:32 20 that as an answer.

21 A. It's five, maybe six, maybe seven, but I
22 haven't --

23 Q. Five to seven percent?

24 A. I will accept that.

03:33 25 Q. Are there any litigation matters you have

03:33 1 worked on in the last 36 months other than this
2 case?

3 A. 36 months. No, no, nothing litigation.

4 Q. Okay. What percentage of your income over
03:33 5 the past year has been derived from serving as an
6 expert in litigation matters?

7 A. 15 percent, 20, somewhere between 15 and
8 20.

9 Q. Now, I think you told me earlier, sir,
03:33 10 that you billed the company \$20,000 to date?

11 A. That was an approximation, yes.

12 Q. Okay. How much additional time is accrued
13 but not yet billed?

14 MR. BERNARDO: Objection to form.

03:34 15 A. I haven't billed for -- I bill monthly. I
16 haven't billed for the month of September. I
17 haven't counted up the hours. I would guess that
18 we'll be talking 50 hours for the month of
19 September.

03:34 20 Q. (BY MR. SPOHRER) And how much are we
21 talking about per hour?

22 A. 160.

23 Q. And is your time charged at 160 per hour
24 for consulting, depositions and trial or is there a
03:34 25 different scale?

03:34 1 A. For depositions and trial I charge twice
2 that, 320.

3 Q. Okay. Exhibit 2 is your typewritten
4 analysis of the Deborah Winn study. Is that
5 correct?

6 A. That's correct.

7 Q. And how would you characterize what this
8 is? Is it a critique or an analysis or what?

9 A. This is what I would call a reanalysis of
03:35 10 the data which I suppose you could also simply call
11 an analysis of the data.

12 Q. Okay. Can you give me your conclusion
13 after reviewing her data?

14 A. I don't have a single conclusion, as you
03:35 15 phrased it. I can tell you some of the things that
16 I found when I analyzed it. One of the results
17 which, whoops, I didn't number the pages. Apologies
18 for that.

19 One of the results which can be found in
03:35 20 the Table 2 variations is that when you look at
21 Dr. Winn's data, this is the data from her
22 dissertation and the New England Journal of Medicine
23 article that she was the first author of in 1981,
24 when you look at the data that produced those
03:36 25 analyses of hers, specifically looking at tongue

03:36 1 cancer cases, you find a lack of association between
2 that outcome and the exposure of using snuff.

3 That's one conclusion that I have reached from this.

4 Q. Okay. Any others?

03:36 5 A. An additional conclusion captured in many
6 of the later tables is that when reanalyzing her
7 Table 3 from the New England journal article, her
8 results are extremely unstable and that many
9 different alternative ways of analyzing what she
03:37 10 purported to be analyzing in Table 3 result in very
11 different outcomes.

12 Q. All right. What do you conclude in
13 reanalyzing her data with regard to the relative
14 risk of oral cancer in general and the use of spit
03:37 15 tobacco?

16 MR. BERNARDO: Objection to form.

17 A. For her data, it's possible to duplicate
18 the analyses that she did in her original work as
19 you might guess. And so basically, I was able to
03:37 20 reproduce the same numbers that she published
21 originally.

22 Q. (BY MR. SPOHRER) And then from what
23 should we conclude about that?

24 A. I think you should conclude about the same
03:38 25 thing that you would conclude from simply reading

03:38 1 her published work.

2 Q. Which is what in a nutshell with respect
3 to the correlation between spit tobacco and oral
4 cancer?

03:38 5 MR. BERNARDO: Objection to form.

6 A. Dr. Winn and her colleagues co-authoring
7 with her reported an association between the
8 exposure and the outcome for -- and it's important
9 to note who it's for -- for a population of old
03:38 10 women in mostly rural North Carolina using a dry
11 snuff product for the most part and with certain
12 other methodological limitations that probably stem
13 from the 20-some year old understanding of
14 epidemiology that was used in developing the
03:39 15 analysis.

16 Q. I'm trying to understand. Do you conclude
17 from reanalyzing her data that there is a
18 correlation, an epidemiological correlation between
19 the use of spit tobacco and oral cancer?

03:39 20 MR. BERNARDO: Object to form.

21 A. You don't reanalyze or analyze one data
22 set and draw a conclusion. I don't know how you
23 phrased that. It's not the way I would have phrased
24 it, epidemiologic conclusion, but what I think you
03:39 25 are getting at is the conclusion that an

03:39 1 epidemiologist would reach; and you simply don't
2 draw a conclusion based on one particular data set
3 outside the context of other available information.

4 Q. (BY MR. SPOHRER) Okay. So I'm trying to
03:40 5 understand your areas of agreement and disagreement
6 with Dr. Winn and I understand that you disagree
7 with her conclusion with respect to the
8 epidemiological connection between spit tobacco and
9 tongue cancer.

03:40 10 MR. BERNARDO: Objection to form.

11 A. I'm not actually sure what her conclusion
12 is on that matter. Her paper is about the numbers
13 in her data and how they convert into statistics.

14 What you were just talking about was her
03:40 15 opinion, and that is not necessarily the same thing.

16 Q. (BY MR. SPOHRER) Okay. Well, what is
17 your opinion as to whether this data supports a
18 connection between use of spit tobacco and oral
19 cancer in general?

03:40 20 MR. BERNARDO: Same objection.

21 A. Again, I think it's important to not try
22 to understand an isolated piece of the overall body
23 of knowledge that exists. I'm not actually quite
24 sure what it means to talk about what one particular
03:41 25 collection of data means when one is aware of the

03:41 1 rest of the body of literature on the matter.

2 Q. (BY MR. SPOHRER) So you are saying you
3 can't or you are unwilling to derive conclusions
4 from this one study?

03:41 5 MR. BERNARDO: Objection to form.

6 A. I draw my conclusions from every study
7 that I can get my hands on and so I guess that means
8 that I don't draw conclusions from one study.

9 Q. (BY MR. SPOHRER) Okay. What is your
03:41 10 opinion based on the Winn data as to any connection
11 between use of spit tobacco and cancer of the oral
12 cavity?

13 MR. BERNARDO: Objection to form.

14 A. Isn't that the same question?

03:42 15 Q. (BY MR. SPOHRER) Possibly.

16 A. Then I guess I have the same answer.

17 Q. Okay, which is?

18 A. Could we have it read back?

19 Q. She will read back the answer, but it's a
03:42 20 different question, but go ahead. Let me do it this
21 way.

22 A. Let me request that you clarify what's
23 different about it, then I'll try to answer it then.

24 Q. Okay, fine. You reviewed Dr. Winn's
03:42 25 original data?

03:42 1 A. Yes.

2 Q. Based upon your review of that data, have
3 you arrived at any opinions or conclusions with
4 respect to whether the use of spit tobacco is
03:42 5 associated with oral cancer?

6 MR. BERNARDO: Objection to form.

7 A. I have arrived at a conclusion based on
8 all of the material that you see in those boxes
9 there, which includes this data and what I have done
03:43 10 with it. Using of all that as inputs, I have
11 arrived at the conclusion that this literature, this
12 science of epidemiology does not support the
13 conclusion that smokeless tobacco causes oral
14 cancer.

03:43 15 Q. We're going to get you some coffee. Go
16 ahead.

17 THE VIDEOGRAPHER: Off the record?

18 MR. SPOHRER: Yeah, please.

19 THE VIDEOGRAPHER: The time is 3:44,
03:43 20 going off the record.

21 (Pause from 3:44 to 3:44 p.m.)

22 THE VIDEOGRAPHER: Time is 3:44 on
23 the record.

24 Q. (BY MR. SPOHRER) We talked earlier about
03:44 25 the Surgeon General's report and you talked about

03:44 1 the fact that that was data which is now 15 such,
2 some years old.

3 What studies do you believe are
4 authoritative in the epidemiological literature
03:44 5 since the Surgeon General's study?

6 A. Well, again, I'm not quite sure what you
7 mean by authoritative, but if it means definitive,
8 if that's what you mean by that, then no single
9 study is that. No single study provides the
03:44 10 answer. Again, it comes back to the entire body of
11 evidence.

12 There are several very useful studies in
13 that literature that are -- that provide more
14 information than other studies do. I won't call
03:45 15 them definitive.

16 Q. Okay. Well, which ones do you think are
17 the most helpful?

18 A. The most helpful studies in that
19 literature, I believe, are the two coming out of
03:45 20 Sweden, first authors Lewin and Schildt.

21 Q. Any others?

22 A. Those are the two that provide the best
23 information because of having samples, good sample
24 size, good methods, a sufficient contrast of
03:45 25 exposure levels and so forth.

03:45 1 Q. Okay.

2 A. That summarized the statistical power
3 sometimes.

4 Q. Lewin and Schildt, that's one study?

03:45 5 A. No, I'm sorry. There were two different
6 studies: Lewin et al, Schildt et al.

7 Q. Okay. Both Swedish studies?

8 A. That's correct.

9 Q. And they are reporting on the use of
03:46 10 Swedish snuff?

11 A. Yes.

12 Q. Did they use Skoal or Copenhagen in their
13 studies?

14 A. Not to my knowledge. I don't know the
03:46 15 extent to which the American products are consumed
16 in Sweden.

17 Q. Do you know what the differences are
18 between Swedish snuff and American spit tobacco?

19 MR. BERNARDO: Objection to form.

03:46 20 A. I mean I'm not a product engineer or
21 chemist. I couldn't tell you too much about that.

22 Q. (BY MR. SPOHRER) Who provided you with
23 the Swedish studies?

24 A. They were part of the collection of
03:46 25 epidemiologic studies, as far as I have been able to

03:46 1 confirm, all epidemiologic studies on the top
2 provided to me by counsel from Skadden.

3 Q. So the two studies which you find to be
4 most helpful in the recent literature are Swedish
03:47 5 studies which were given to you by lawyers for U.S.
6 Tobacco, but you are unable to tell me whether or
7 not the products tested in those studies are similar
8 to the products in question in this case?

9 MR. BERNARDO: Objection to form.

03:47 10 A. I don't think I actually said that.

11 Q. (BY MR. SPOHRER) I'm asking you. How
12 does the Swedish snuff in the Lewin and Schildt
13 reports compare with Skoal and Copenhagen?

14 A. Again, a detailed analysis is -- falls
03:47 15 into other people's expertise, not mine. I know
16 that they are both moist snuff products and that
17 contrasts with, say, chewing tobacco or dry snuff.

18 Q. You are comparing apples and motorcycles.

19 MR. BERNARDO: Objection to form.

03:47 20 Q. (BY MR. SPOHRER) I'm talking about two
21 moist products, one made in Sweden, one made in the
22 United States. You are saying the two most helpful
23 studies are studies of products made and consumed in
24 another country. Is that part of the scientific
method which you believe is a good approach to this

03:48 1 analysis?

2 MR. BERNARDO: Objection to form.

3 A. I'm not quite sure what you think my
4 opinion about the scientific method is since I
03:48 5 haven't said anything about that. These are good
6 studies. They provide useful information.

7 Q. (BY MR. SPOHRER) About a different
8 product than what we are dealing with here, yes?

9 MR. BERNARDO: Objection to form.

03:48 10 A. I don't have independent knowledge that
11 would cause me -- I don't have knowledge that would
12 cause me to conclude that it's a different product.

13 Q. (BY MR. SPOHRER) What knowledge do you
14 have to conclude that it's the same product?

03:48 15 MR. BERNARDO: Objection to form.

16 Q. (BY MR. SPOHRER) I mean have these
17 lawyers told you to assume it's the same product?

18 MR. BERNARDO: Objection to form.

19 Bob, to use your words, that's beyond the pale.

03:49 20 It's beyond the pale, Bob, and you know it.

21 Q. (BY MR. SPOHRER) I'm asking for what is
22 the basis of your assumption that the, quote,
23 Swedish studies are based on a comparable product?
24 Do you have any information on that subject?

03:49 25 A. I wouldn't characterize my conclusion as

03:49 1 an assumption. These -- the information that I have
2 says that it's a comparable product.

3 I observe that they are both moist snuff
4 products. I observe that -- going back to your
03:49 5 previous question about tobacco specific
6 nitrosamines that if that is what people think is
7 the carcinogenic agent, to use the toxicology terms,
8 if that's what people think it is, then there are
9 comparable levels of those chemicals in the Swedish
03:50 10 product as experienced by the subjects in those
11 studies compared to modern American product.

12 In terms of other aspects of the chemical
13 composition, I couldn't tell you much about that.

14 Q. When you say I observe this and I observe
03:50 15 that, what do you mean "I observe"?

16 A. Sorry. There is a small literature out
17 there that reports what the content in terms of
18 tobacco specific nitrosamines is for different snuff
19 products. And I have looked at that and it shows
03:50 20 that the amounts contained in the Swedish product
21 during the exposure period for the Lewin and Schildt
22 study populations, the amount in the Swedish product
23 is comparable to the amount in the American product
24 right now.

03:51 25 Q. Okay. So is it correct that you have no

03:51 1 personal knowledge on the composition of these
2 various products, but for the purposes of your
3 analysis here, you are assuming that the Swedish
4 studies are based on a product which is comparable
03:51 5 or similar to the American product?

6 MR. BERNARDO: Objection to form.

7 A. If by personal knowledge you mean have I
8 ever done a chemical analysis or anything like that,
9 no, that's not what I do. I'm not assuming, again.

03:51 10 The information that I have been able to
11 find that those who think that there is a problem
12 with this product emphasize as being the relevant
13 chemical constituents. The information that I have
14 been able to find about those shows that it is
03:52 15 comparable.

16 Q. (BY MR. SPOHRER) Other than the Lewin and
17 Schildt studies, are there any others which you
18 found helpful since 1986?

19 A. I found many of the studies contribute to
03:52 20 my knowledge; that is, I reviewed them all. They
21 all are part of my understanding of what my science
22 has to say about this matter. I single out those
23 two because they provide the most useful information
24 because of the statistical characteristics.

03:52 25 Q. Let me hand you your copy of a document

03:53 1 you had in your file. We have attached a copy of
2 this as Exhibit 3 to the deposition. You all have
3 one there. What is this, sir?

4 (Phillips Exhibit No. 3 marked.)

03:53 5 A. This is a photocopy of a pamphlet that my
6 dentist, my personal dentist pulled out of her file
7 when I asked her what she knew about smokeless
8 tobacco, snuff in particular, and what types of
9 things that she and her colleagues to the extent she
03:53 10 knew said about it.

11 Q. Um-hmm. Your dentist is Diana Smith?

12 A. That's right.

13 Q. And did you have a discussion with her
14 about smokeless tobacco?

03:53 15 A. Yes.

16 Q. What did she say about it?

17 A. I asked her about -- again, I said I was
18 curious as to if she had any material or anything
19 that she distributed.

03:54 20 She said she, in fact, didn't have
21 anything she was distributing but had a copy of this
22 in her file and was able to make a copy of it for
23 me. I mentioned to her that I was doing a project
24 on it and, you know, I was curious what she knew
about it, what she thought about it.

03:54 1 I was surprised to find that she was a
2 little hesitant in her answer because I assumed that
3 she thought, because I was someone at the School of
4 Public Health, which is usually concerned in trying
03:54 5 to change people's behavior and so forth, she
6 offered the information that she didn't think that
7 there was much of a health problem. That she had
8 recently gone to a presentation at the Medical
9 Center. She works at the Texas Medical Center. And
03:54 10 found out that the best information available was
11 that basically that the information contained in
12 this pamphlet was, in fact, misleading.

13 She was surprised, I think, to find that I
14 agreed with her because this was at the point when I
03:55 15 had done the research that I described.

16 Q. Okay. You saw this as from the American
17 Cancer Society?

18 A. Yes.

19 Q. And that they report that there is an
03:55 20 increased incidence of oral cancer for people that
21 use snuff?

22 A. Where are we looking?

23 Q. I'm looking at the last page. "Snuff is
24 not a safe alternative to smoking. It contains 10
03:55 25 times the amount of nitrosamines, the same cancer

03:55 1 causing substance found in cigarettes."

2 Do you disagree with that assertion from
3 the American Cancer Society?

4 A. I really don't have any basis to either
03:55 5 agree or disagree with their chemical analysis.

6 Q. Well, do you have any reason to believe
7 that the American Cancer Society is incapable of
8 calculating the amount of nitrosamines or cancer
9 causing substances found in cigarettes and in spit
03:56 10 tobacco?

11 MR. BERNARDO: Objection to form.

12 A. I actually don't even know that they did
13 any calculations themselves. There are no
14 footnotes, no discussion of methods in this paper.

03:56 15 Q. (BY MR. SPOHRER) The next paragraph says,
16 More than 87 percent of oral cancers are directly
17 linked to smokeless tobacco and cigarette use. Do
18 you agree or disagree with that statement?

19 A. It's a little difficult for me to
03:56 20 understand what they're basing that on and exactly
21 what they mean. That's not really in the language
22 of science or epidemiology. I find it -- it's an
23 imprecise enough statement that it's difficult to
24 agree or disagree with.

03:56 25 Q. Of course, this isn't written for

03:56 1 epidemiologists. It's written for people to pick up
2 in their dental office. Right?

3 MR. BERNARDO: Objection to form.

4 Q. (BY MR. SPOHRER) So what about the
03:57 5 statement is difficult for you to understand: "More
6 than 87 percent of oral cancer cases are directly
7 linked to smokeless tobacco and cigarette use"?

8 A. The statement "directly linked" doesn't
9 clearly translate into any scientific claim as far
03:57 10 as I can tell. So I don't know what they mean.

11 Q. Well, what if they were to say "caused
12 by"?

13 A. I would know what that meant.

14 Q. Would you agree or disagree?

03:57 15 A. The best numbers, well, first off, whether
16 I agreed or disagreed, the first thing I would point
17 out is that it is an incredibly misleading
18 statement, "are directly linked to smokeless tobacco
19 and cigarette use." If you are talking --

03:57 20 Q. You said you didn't like the words
21 "directly linked" so I've changed that to cause.
22 Now you are going back to the other.

23 A. I will accept the change. If you said --
24 if you made the statement, if someone were to make
03:58 25 the statement, dah-dah-dah-dah-dah were caused by,

03:58 1 then put those two things in there, it basically
2 amounts to nonsense.

3 The conclusions that they are trying to
4 draw here are about smokeless tobacco. Why would
03:58 5 you make a statement about the conjunction smoking
6 and smokeless tobacco? So I guess the smokeless
7 tobacco and cigarette use more precisely is what
8 they said.

9 So to start out with I would say anyone
03:58 10 making that statement is a little bit confused about
11 what it is that they are trying to claim. It's not
12 clear whether they are talking about smokeless
13 tobacco, cigarettes, some combination of the two and
14 so forth.

03:58 15 In terms of whether I agree with the
16 amended statement, which I believe you said was more
17 than 87 percent of oral cancer cases are caused by
18 smokeless tobacco and cigarette use, my reading of
19 the epidemiology literature more generally on the
03:59 20 causes of oral cancer, which is not something I have
21 studied every word of but that I have obviously read
22 some of in the course of this, the numbers that
23 people like Fraumeni like to present are that 75
24 percent of all cases are caused by smoking and
03:59 25 alcohol consumption.

03:59 1 If 75 percent are attributable to smoking
2 and alcohol consumption, it seems very unlikely that
3 87 percent are attributable to smoking and smokeless
4 tobacco.

03:59 5 So based on that implicit calculation, I
6 would have to say that I find that statement
7 unlikely. But again, I don't know what they are
8 basing it on. I was talking about this hypothetical
9 rewriting of it. When they say "directly linked," I
04:00 10 don't know what they mean. And so I'm not actually
11 commenting on the statement as written here in this
12 document.

13 Q. Okay. Dr. Byers, who was sitting in that
14 chair a few hours ago, said that it was his opinion
04:00 15 that 95 percent plus of oral cancers are related to
16 tobacco use.

17 MR. BERNARDO: Objection to form.

18 Q. (BY MR. SPOHRER) Do you disagree with
19 that statement?

04:00 20 A. I really don't know exactly what he was
21 saying, what the context was. It's a little
22 difficult to make sense of that out of context.

23 Q. It's generally accepted among head and
24 neck surgeons that 90 to 95 percent of oral cancers
04:00 25 are related to tobacco use.

04:00 1 MR. BERNARDO: Objection to form.

2 Q. (BY MR. SPOHRER) Do you have an opinion
3 on that?

4 MR. BERNARDO: Same objection.

04:00 5 A. I don't know what's generally accepted by
6 head and neck surgeons.

7 Q. (BY MR. SPOHRER) Which of the studies
8 from 1986 forward have you rejected as being
9 unreliable?

04:01 10 MR. BERNARDO: Objection as to form.

11 Q. (BY MR. SPOHRER) Let me just put this in
12 context. We talked about the ones you felt most
13 helpful and you said there were others that you
14 considered for part of your general reading on the
04:01 15 subject, but were there some that you rejected as
16 being inherently unreliable?

17 MR. BERNARDO: Objection as to form.

18 A. There is no dichotomy of reliable,
19 unreliable, helpful, unhelpful. It's simply a
04:01 20 matter of degree how helpful.

21 Q. (BY MR. SPOHRER) So they are all helpful
22 in some sense, some more than others?

23 A. They all were part of what I tried to read
24 and understand in order to form my opinions so in
04:01 25 that sense they all helped me in forming my opinion.

04:01 1 Q. All right. Why don't we take a break for
2 a few moments and I'll pull some of those studies
3 that we want to talk with you about, then we'll get
4 back to this.

04:02 5 THE VIDEOGRAPHER: Time is 4:02 going
6 off the record.

7 (Pause from 4:02 to 4:26 p.m.)

8 THE VIDEOGRAPHER: Time is 4:26,
9 we're on the record.

04:26 10 Q. (BY MR. SPOHRER) Doctor, we spoke a
11 little bit earlier about your vegetarianism and that
12 there are health issues with regard to that and I
13 gather you try to lead a healthy life style as much
14 as you can. Is that true?

04:26 15 A. I wouldn't brag that I'm the -- lead the
16 healthiest life style in the world; more healthy
17 than some.

18 Q. Would you agree irrespective of the
19 statistical issues and epidemiological issues that
04:26 20 we're dealing with here today that just as a matter
21 of general health, it would be good for all of us to
22 avoid tobacco use, if possible?

23 MR. BERNARDO: Objection to form.

24 A. I think the only way that you could draw a
04:26 25 conclusion one way or another on that statement is

04:26 1 with those very bits of information that you asked
2 me to disregard so I'm not sure where I can base
3 that statement on.

4 Q. (BY MR. SPOHRER) My last question didn't
04:26 5 ask you to disregard anything. I'm just asking
6 whether as a matter of general good health, all of
7 us should avoid tobacco products, if possible?

8 MR. BERNARDO: Objection to form.

9 A. Well, it's important to distinguish
04:27 10 tobacco products. I brought this up previously when
11 we were talking about that pamphlet.

12 Cigarettes and smokeless tobacco are very
13 different things. The epidemiology on them has
14 shown very different results. And so I think that
04:27 15 any statement about tobacco as a collective concept
16 that includes both of those is likely to be
17 misleading.

18 Q. (BY MR. SPOHRER) Okay. So you think that
19 those of us that consume tobacco by using it as oral
04:27 20 tobacco are better off than those who smoke
21 tobacco?

22 MR. BERNARDO: Objection to form.

23 A. Smoking by oral --

24 Q. (BY MR. SPOHRER) Strike that.

04:28 25 A. I'm having a trouble with a distinction

04:28 1 with oral.

2 Q. By consuming tobacco, you think it's
3 better that we use it as an oral tobacco rather than
4 a smoking tobacco?

04:28 5 MR. BERNARDO: Objection to form.

6 A. You mean smokeless tobacco. Smoking is an
7 oral delivery system too.

8 Q. (BY MR. SPOHRER) Dipping and chewing is
9 preferable to smoking if one is going to consume
04:28 10 tobacco. Is that what you are saying?

11 A. There is strong evidence, one of the
12 strongest bodies of evidence in health science, that
13 smoking causes various diseases at rates that are
14 very much worth being concerned about. So I would
04:29 15 always advise somebody if they were concerned about
16 their health to not smoke.

17 In terms of dipping, before I tried to
18 offer generic advice on this point, I think we
19 discussed this actually with regard to a
04:29 20 hypothetical 18 year old version of my girlfriend's
21 son, before I tried to form an opinion on the health
22 effects of smokeless tobacco in general, I would
23 want to broaden the research that I did.

24 Q. Okay. You are spending a considerable
04:29 25 amount of your professional time on this case, are

04:29 1 you not?

2 MR. BERNARDO: Objection to form.

3 A. I don't know what you regard to be
4 considerable amount of time.

04:29 5 Q. (BY MR. SPOHRER) Well, 50 hours in the
6 month of September and September is not even over.
7 This is the 26th. Would you agree that's a
8 considerable amount of your professional time?

9 MR. BERNARDO: Same objection.

04:30 10 A. I don't know if I have a definition of
11 considerable, a considerable amount of my time. We
12 know how many hours it is. We can just work with
13 that.

14 Q. (BY MR. SPOHRER) Are you spending a lot
04:30 15 of time on this case?

16 A. Same idea. I spent, as I said, 50 hours
17 so far this month. I've spent roughly a hundred
18 hours before that. I spent more time than that on
19 other things and less time than that on other
04:30 20 things. You have the exact numbers. I'm not sure
21 why you need it to be described as considerable or
22 not.

23 Q. Based on the 150-plus hours that you have
24 spent on this project, are you planning on
04:30 25 publishing your results?

04:30 1 A. I haven't formed any specific plans about
2 that one way or the other.

3 Q. Okay. Has U.S. Tobacco or its attorneys
4 asked you to publish on the subject?

04:31 5 A. No.

6 Q. Before you were contacted with regard to
7 this case, had you done any work for any tobacco
8 company or any of its related trade groups?

9 MR. BERNARDO: Objection to form.

04:31 10 A. I -- related trade groups, I'm not sure
11 who you mean. The tobacco companies have --
12 cigarette companies have merged with a lot of other
13 companies. I have done work in enough different
14 places that I might have -- my work might have
04:31 15 overlapped that of, say, Kraft Foods which was or is
16 part of a cigarette company. So I'm not quite sure
17 how broad you are asking when you are talking about
18 related trade groups.

19 Q. (BY MR. SPOHRER) What I mean is related
04:31 20 trade groups such as the Smokeless Tobacco Research
21 Council, the Smokeless Tobacco Council, the Tobacco
22 Institute or any similar trade group?

23 A. I have had no interaction with any of
24 those groups.

04:32 25 Q. You have read the deposition of Dr. Scott

04:32 1 Tomar in this case?

2 A. No, I actually haven't read it. It was
3 given to me and I simply haven't had time to read
4 that particular document.

04:32 5 Q. Did you read the deposition of Kelli
6 McMullin?

7 A. Yes.

8 Q. Did you read the deposition of Michael
9 McMullin?

04:32 10 A. Yes.

11 Q. Is there anything else that you were given
12 that you did not read besides the Tomar deposition?

13 A. There is a huge stack of papers in one of
14 those boxes that is associated with the Winn data
04:32 15 that was given to me at the same time that I
16 received the data itself. It includes hundreds of
17 pages of computer runs and statistical output from
18 that. I have only sampled the total contents of
19 that material.

04:33 20 Q. Okay. All right. We're going to attach
21 some documents to this deposition, Doctor, and I
22 just want to make sure that we're -- I will give
23 your attorneys a copy as well. This first document
24 which I will mark as Exhibit 4 is a chapter on
epidemiology. What is this from?

1 (Phillips Exhibit No. 4 marked.)

2 A. This is a chapter by Deborah Winn, excuse
3 me, in an NCI monograph, National Cancer Institute,
4 published roughly 1992. The entire document is
04:33 5 sitting there and I could give you a better idea of
6 the further details about it.

7 Q. Okay. Now Deborah Winn is the scientist
8 who did the original, what we referred to as the
9 Winn study?

04:34 10 A. That's right.

11 Q. She's with the National Cancer Institute?

12 A. She was at the time she wrote this. I
13 don't know exactly where her career has taken her
14 since then.

04:34 15 Q. Do you know anything about her competence
16 or her ability to do epidemiological work?

17 A. Nothing more than knowing about her degree
18 and about what jobs she's held.

19 Q. Well, the methodology of her studies, do
04:34 20 you have any quarrel with that?

21 A. Her study was conducted in ways that I
22 certainly wouldn't have chosen to analyze things.

23 Q. Okay. This chapter, you read this chapter
24 from the NCI monograph?

04:34 25 A. Yes.

04:34 1 Q. Okay. Dr. Winn reports in the abstract
2 that epidemiological studies of smokeless tobacco
3 and cancer continue to show that smokeless tobacco
4 increases oral cancer risk and possibly the risk of
04:35 5 other head and neck cancers, suggesting a continuing
6 need to monitor oral cancer trends and to
7 communicate health risks to the public.

8 Do you agree or disagree with that
9 statement from her that smokeless tobacco increases
04:35 10 oral cancer risk?

11 MR. BERNARDO: Objection to form.

12 A. My reading of the epidemiologic literature
13 sitting here in 2002, which gives me some advantages
14 that she didn't have when she wrote that, is that
04:35 15 this literature does not show that smokeless tobacco
16 causes oral cancer

17 (Phillips Exhibit No. 5 marked.)

18 Q. Okay. Let me show you what I am marking
19 as Exhibit 5, which is the next document which
04:36 20 appears to be a page from the World Health
21 Organization International Agency for Research on
22 Cancer, publication No. 100 in 1990.

23 A. Yes.

24 Q. Why is this in your materials?

04:36 25 A. Let me take a look at it.

04:36 1 I believe this was from early in my
2 research on this topic in which -- I don't know
3 whether I gathered this or my research assistant
4 did. It probably was her and I asked her to just
04:37 5 gather any useful background information on the
6 topic.

7 (Phillips Exhibit No. 6 marked.)

8 Q. Okay. The next article which I am
9 labeling as No. 6 is an editorial from the Journal
04:37 10 of Internal Medicine, "Snuff - How dangerous is it?
11 The controversy continues" dated 2001. What was the
12 significance of this in your research?

13 A. Again, I believe I gathered this or my --
14 I gathered this early in our research in the
04:37 15 interest of getting the best general background idea
16 of what the discussion in the literature was.

17 Q. Well, did you consider this article?

18 A. What do you mean, did I consider it?

19 Q. Did you review the article and consider
04:38 20 its contents?

21 A. I have read it. I have not read it for
22 quite sometime so I forget exactly what it says.

23 Q. Look at page 4. I'm sorry, four --

24 A. It starts on 457.

04:38 25 Q. 459, I guess it is. "Is Swedish snuff

04:38 1 different?" Do you see that?

2 A. Yes.

3 Q. Do you see in that paragraph the author is
4 discussing how the process of manufacturing Swedish
04:38 5 snuff is very different from how it is done in the
6 United States?

7 A. The document says -- the document says,
8 "In the United States, snuff production involves a
9 fermentation process, whereas Swedish snuff is
04:39 10 nowadays prepared by heating process without
11 traditionally smoke-drying, yielding a semisterile
12 product with a lower content of polycyclic aromatic
13 hydrocarbons than previously."

14 Then there is a citation No. 24 on that
04:39 15 which is to Ahlbom Olsson et al, 1997.

16 Q. I actually did not ask you to read the
17 paragraph. I asked you to consider the fact that
18 the author says that there is a difference in the
19 way Swedish and American products are made?

04:39 20 A. I'm not sure what you mean by, did I
21 consider it? I read it. I was aware of it.

22 Q. A few moments ago you were telling me that
23 the data from the Swedish studies were the most
24 helpful that you could find and we discussed whether
04:40 25 or not it's the same product or not. In your file

04:40 1 you have this data which apparently is from a
2 Swedish researcher who states that the whole process
3 of manufacturing snuff in Sweden is different from
4 the process of making it in the United States?

04:40 5 MR. BERNARDO: Objection to form.

6 A. I don't know if it says that the whole
7 process is different. It made that distinction that
8 it was there. I'm aware of there being differences
9 with this.

04:40 10 Q. (BY MR. SPOHRER) Are you as a scientist
11 at all concerned that you have been asked by U.S.
12 Tobacco to consider equating a very different
13 product from theirs with regard to the health risks
14 involved?

04:40 15 MR. BERNARDO: Objection as to form.

16 A. U.S. Tobacco or counsel did not suggest in
17 any way how I should conduct my scientific review or
18 draw conclusions. They said no such thing.

19 Q. (BY MR. SPOHRER) What is the basis on
04:41 20 which you are saying that the Swedish studies
21 involving Swedish snus or snuff is comparable to
22 Skoal and Copenhagen?

23 A. There is a literature that attempts to
24 explore whether there is a difference, in particular
04:41 25 with regard to those chemicals tobacco specific

04:41 1 nitrosamines between Swedish product and American
2 product because the toxicologists who are interested
3 in the implications of those chemicals would
4 naturally be concerned about that.

04:41 5 As a result, there is a literature that
6 enables me to conclude that the quantity of those
7 chemicals is comparable and, therefore, draw
8 conclusions about the similarities of the products.

9 Q. So this paper which is now Exhibit 6 to
04:42 10 your file or to this deposition, you reject this
11 author's statement about how different the processes
12 are in making the two products?

13 MR. BERNARDO: Object to form.

14 A. I didn't say anything about the processes
04:42 15 for making the products.

16 Q. (BY MR. SPOHRER) Let me show you Exhibit
17 7 which is -- put this on the back, Elaine --
18 another document in your file which is an editorial
19 to the Journal of the American Medical Association.
04:42 20 Are you familiar with that publication?

21 (Phillips Exhibit No. 7 marked.)

22 A. I think this is a letter, yes, I'm
23 certainly familiar with it.

24 Q. Yes, a letter. A letter to the editor.

04:42 25 And JAMA, is that an authoritative medical source?

04:43 1 A. It is a respected journal.

2 Q. These authors from the Medical College of
3 Georgia in Augusta are writing to the editor on
4 teenage chewing tobacco use. Did you consider this
04:43 5 letter to the editor in arriving at your opinions?

6 A. I'm reviewing it because it's something I
7 haven't read in a while and would have to remind
8 myself of the content.

9 Q. Well, turn to the middle column, the
04:43 10 second to last paragraph, "It has been well
11 documented that there is an increased risk of oral
12 and pharyngeal carcinomas in users of smokeless
13 tobacco." You see that?

14 A. That statement is footnoted to Winn and
04:43 15 some sort of, something called the Council on
16 Scientific Affairs, also or published in 1986. I
17 see the statement.

18 Q. Well, it's actually footnoted to Winn, to
19 her study, to Blot, and others in the New England
04:44 20 Journal of Medicine and then the Council on
21 Scientific Affairs of JAMA.

22 MR. BERNARDO: Objection to form.

23 A. I'm not sure what the question is. But
24 the footnote is to Winn, Blot, Shy, et al. That is
04:44 25 what's typically called the Winn study. The New

04:44 1 England Journal of Medicine article, Winn is the
2 first author of several.

3 The second one, yes, something called the
4 Council on Scientific Affairs, health effects of
04:44 5 smokeless tobacco. It was published in JAMA. That
6 doesn't mean it was a statement by JAMA or editorial
7 or anything like this. I don't know what that is.

8 Q. (BY MR. SPOHRER) But you disagree with
9 it?

04:44 10 MR. BERNARDO: Objection as to form.

11 A. If the statement is the Winn study has
12 been used to make the claim that there is an
13 increased risk, we all know that's true.

14 When this was published in 1986, that was
04:45 15 the single thing that people tended to look to as
16 far as I could tell from the literature.

17 As I said, I reach -- I have reached my
18 conclusion based on the information available in
19 2002 and so I have many other sources to work from
04:45 20 other than just that one.

21 Q. (BY MR. SPOHRER) How is it that
22 epidemiologists look at the same data that you look
23 at and that you arrive at a different conclusion as
24 to the health effects of smokeless tobacco?

04:45 25 MR. BERNARDO: Objection as to form.

04:45 1 / A. I'm not sure who you are talking about,
2 what they said.

3 Q. (BY MR. SPOHRER) Well, I'm talking about
4 the group we just mentioned, the Journal of the
04:46 5 American Medical Association, Council on Scientific
6 Affairs. I'm talking about the World Health
7 Organization. I'm talking about the International
8 Agency for Research on Cancer. I'm talking about
9 the American Cancer Society. I'm talking about
04:46 10 every recognized medical or scientific organization
11 throughout the world that has looked at the same
12 data that you have looked at and concluded that the
13 use of spit tobacco poses an increased risk of oral
14 cancer.

04:46 15 Can you explain to me, sir, how it is that
16 you look at the same data that they do and arrive at
17 a completely different conclusion?

18 MR. BERNARDO: Objection as to form.

19 A. I really don't know what data all of those
04:46 20 individuals that you are talking about have looked
21 at and I don't know all of the conclusions that they
22 have reached. So I really have no idea.

23 Q. (BY MR. SPOHRER) Are you concerned that
24 you stand alone among epidemiologists in the world
04:47 25 with respect to your opinion that the use of spit

04:47 1 tobacco does not pose an increased risk of oral
2 cancer?

3 MR. BERNARDO: Objection as to form.

4 A. I'm not under the impressions that I stand
04:47 5 alone on the opinion that the epidemiologic
6 literature does not show a relationship between
7 smokeless tobacco and oral cancer.

8 Q. (BY MR. SPOHRER) The next document No. 8
9 is a consensus conference, sir, from the National
04:47 10 Institutes of Health on the health applications of
11 smokeless tobacco dated 1986. What was the
12 significance of this in your studies?

13 (Phillips Exhibit No. 8 marked.)

14 MR. BERNARDO: Objection as to form.

04:48 15 A. It's in the collection of material I
16 reviewed, again because of my interest in
17 understanding what -- as much as possible about what
18 the literature said about the topic.

19 Q. (BY MR. SPOHRER) Do you know what
04:48 20 polonium 210 is?

21 MR. BERNARDO: Objection as to form.

22 A. It's a isotope of an element.

23 Q. (BY MR. SPOHRER) Okay. It's a
24 radioactive alpha emitter, isn't it, sir?

04:48 25 MR. BERNARDO: Objection as to form.

04:48 1 A. My nuclear physics is far, far and distant
2 in my background. I don't know whether -- I don't
3 know anything more other than recognizing it as an
4 isotope of an element.

04:48 5 Q. (BY MR. SPOHRER) Polonium 210 is a known
6 radiation carcinogen, isn't it?

7 MR. BERNARDO: Objection as to form.

8 A. I don't have any substantial knowledge
9 about that assertion one way or the other.

04:49 10 Q. (BY MR. SPOHRER) You don't know whether a
11 radioactive alpha emitter is a cancer causing
12 substance?

13 MR. BERNARDO: Objection as to form.

14 Bob, it's getting late in the day if you are going
04:49 15 to ask him the same question multiple times just to
16 see if he changes his answer. We're going to be
17 here all night.

18 But go ahead and answer it again.

19 A. I don't know anything much other than I
04:49 20 said about polonium 210.

21 Q. (BY MR. SPOHRER) How about formaldehyde,
22 is that something that's good for people?

23 MR. BERNARDO: Objection as to form.

24 A. I'm not sure what you mean by "good for
04:50 25 people."

04:50 1 Q. (BY MR. SPOHRER) Is it good for people to
2 consume formaldehyde or products containing
3 formaldehyde?

4 MR. BERNARDO: Objection as to form.

04:50 5 A. I would have to know more about the
6 individual product before I could form an opinion
7 about that.

8 Q. (BY MR. SPOHRER) You would have to know
9 more about formaldehyde to know whether or not --

04:50 10 MR. BERNARDO: Objection. Bob, if
11 you want to ask him a question, you can do it. You
12 don't need to lean into him and start getting really
13 aggressive with him. I have been really patient as
14 you have been asking a lot of these questions and
04:50 15 I'm trying to be reasonable here. But if you want
16 to ask him a question and discover information, do
17 that, but let's do it in a reasonable way here.

18 Q. (BY MR. SPOHRER) What else do you need to
19 know about formaldehyde to know whether or not it
04:50 20 was good for people to consume it?

21 MR. BERNARDO: Object as to form.

22 A. I don't think I could list everything that
23 I would want to know in order to form that
24 conclusion.

04:50 25 Q. (BY MR. SPOHRER) I don't think you could

04:50 1 either. Do you need to know anything other than the
2 fact that formaldehyde is a poison?

3 MR. BERNARDO: Object to form.

4 A. I'm not sure what you mean by formaldehyde
04:50 5 is a poison.

6 Q. (BY MR. SPOHRER) Well, you think about
7 that because we'll be hearing that again in court.

8 MR. BERNARDO: Move to strike that
9 last comment

10 (Phillips Exhibit No. 9 marked.)

11 Q. (BY MR. SPOHRER) I have marked as Exhibit
12 9 the next article in your file which is called "The
13 Reemergence of Smokeless Tobacco." This is a
14 special article in the New England Journal of
04:51 15 Medicine which was in your file. Did you consider
16 this article, sir, in arriving at your opinions?

17 A. I have read this article. It's -- and my
18 opinions are based on everything that I've had an
19 opportunity to read.

04:51 20 Q. Did you reject the conclusions of these
21 authors that smokeless tobacco is an addictive
22 poison?

23 MR. BERNARDO: Objection as to form.

24 A. Could you tell me where they say that?

04:51 25 Q. (BY MR. SPOHRER) Well, that's my

04:51 1 paraphrasing of it, but it is concluded by the
2 authors that the epidemiological evidence
3 establishes that the use of smokeless tobacco is a
4 carcinogen and that the nicotine in the product is
04:51 5 an addictive substance.

6 MR. BERNARDO: Objection as to form.

7 A. I'm not sure where it says that in this
8 article. Do you have a paragraph -- you look like
9 you are reading from something.

04:52 10 Q. (BY MR. SPOHRER) I just have the copy of
11 the article.

12 A. Right. But I wasn't sure where you were
13 reading those phrases that you just presented.

14 Q. Okay. Reading from the abstract, "The use
04:52 15 of smokeless tobacco has been shown to cause oral
16 pharyngeal cancer." You see that, sir?

17 A. Yes.

18 Q. Okay.

19 MR. BERNARDO: Where are you reading
20 from?

21 MR. SPOHRER: I'm reading from the
22 abstract about midway down the first paragraph.

23 Q. (BY MR. SPOHRER) Do you reject that
24 finding by these authors?

04:52 25 A. I have already mentioned, note the date on

04:52 1 this paper. It's 1986. I have already mentioned
2 that when I formed my opinion based on the quality
3 of the science and the total body of evidence
4 available here and now, I was able -- I had
04:52 5 advantages that people reading the literature in
6 1986 didn't have and so to describe it as agreement,
7 disagreement, rejection really isn't a fair
8 characterization. I similarly had the opportunity
9 to base my conclusion on a different set of
04:53 10 information.

11 (Phillips Exhibit No. 10 marked.)

12 Q. All right, sir. The next article I have
13 handed you from your file is called "Incidence and
14 Predictors of Smokeless Tobacco Use among U.S.
04:53 15 Youth" by Scott Tomar. He's the gentleman whose
16 deposition was given to you but you have not read.
17 Do you know Dr. Tomar professionally?

18 A. No.

19 Q. Have you considered this article and this
04:53 20 study in your arriving at your opinions?

21 A. I still don't know exactly what you meant
22 by "considered". I believe I have read this,
23 although not terribly recently. And my opinion is
24 based on the totality of what I have read, what I
04:54 25 have analyzed and so on.

04:54 1 Q. Okay. Then lastly, sir, we have I think
2 the two articles which you said you found most
3 helpful and this one has your notes on it. Is that
4 the Schildt article that you were referring to?

04:54 5 A. You just handed me the two articles, the
6 Schildt et al and the Lewin et al epidemiologic
7 studies.

8 Q. Let's mark them separately, sir, as
9 Exhibits 11 and 12. These are the two articles that
04:54 10 you were referring to as the most helpful?

11 (Phillips Exhibit Nos. 11 & 12 marked.)

12 MR. BERNARDO: Objection as to form.

13 A. I forgot exactly how I described them.
14 These are the two recent epidemiologic studies of
04:54 15 the association in question that have the most
16 useful collection of information because of having
17 sufficient sample size and other characteristics.

18 Q. (BY MR. SPOHRER) Okay. Have you any work
19 remaining to do between now and the time that you
04:55 20 testify?

21 MR. BERNARDO: Could you be more
22 specific?

23 A. You mean do more specific research on --

24 Q. (BY MR. SPOHRER) Yeah. Do you have work
04:55 25 yet undone that you have been asked to do or that

04:55 1 you want to do for this case?

2 A. There is no work that I have been asked to
3 do that I haven't done yet. There is no further
4 research that I have in mind that I think needs to
04:55 5 be done in preparing my expert testimony.

6 Q. Okay. Have you been asked to assist in
7 preparing exhibits for the trial?

8 A. I was asked to provide the, well, not data
9 but say low level statistics for use in exhibits for
04:55 10 the trial and I have provided some such information,
11 yes.

12 Q. What do you mean, low level statistics?

13 A. Sorry. I started to say data. Data is
14 not quite the right word. Data refers to the raw
04:56 15 inputs, simple summary statistics, sort of the next
16 level of aggregation. Instead of looking at each
17 individual data record, you say, okay, there are
18 five of these and 10 of these. That's the form of
19 the information that I've provided for this
04:56 20 particular application.

21 Q. I'm sorry, I'm still lost. Tell me what
22 you have given these lawyers and how it would appear
23 if we had it in front of us. And by the way, why
24 isn't it here in front of us?

04:56 25 MR. BERNARDO: Objection to form.

04:56 1 It's not, Bob?

2 Q. (BY MR. SPOHRER) Maybe it is. Can you
3 direct me to it? Is it in one of these boxes?

4 A. There are -- well, I believe there are in
04:56 5 those boxes several printouts which are outputs from
6 SEER data, SEER being the roughly nationwide cancer
7 registry collection that is usually considered the
8 best source of cancer incidence and mortality data.
9 I did several runs from that data to produce some
04:57 10 information for, as I understood, for purposes
11 creating exhibits. I forget what you call them. I
12 think it's there. I put it in my collection of
13 papers.

14 MR. SPOHRER: Okay. We would like to
04:57 15 pause and let the Doctor identify that for me,
16 please, and --

17 MR. BERNARDO: Can we go off the
18 record?

19 MR. SPOHRER: Yeah, let's take a
04:57 20 break and do that.

21 THE VIDEOGRAPHER: Time is 4:58,
22 going off the record.

23 (Pause from 4:58 to 5:00 p.m.)

24 THE VIDEOGRAPHER: Time is 5:00,
05:00 25 we're on the record.

05:00 1 Q. (BY MR. SPOHRER) Doctor, you've had a
2 chance to look through the materials. Is that data
3 that you were just referring to here?

4 A. There are three pieces of it. Two of them
05:00 5 are here as we discussed during the break. I have
6 the other on disks. We had a miscommunication about
7 who was going to put a copy of it in the box. I can
8 print it out and provide that to you here today.

9 Q. Okay. And what -- what is the source of
05:00 10 this information?

11 A. This is from the SEER registry data.

12 Q. On what subject?

13 A. On, generally on the rates of oral -- the
14 incidence rate of oral cancer broken down by age,
05:01 15 year, sex, and race. Then more specifically tongue
16 cancer broken down the same way.

17 And the third one, which I said I will
18 provide to you but is not printed out at the moment,
19 is on what in the SEER data is a catch-all that
05:01 20 basically includes gum and buccal cancer, although
21 it apparently possibly includes, I believe, roof of
22 the mouth or one other site.

23 Q. Okay. And these are from the National
24 Surveillance Reporting Service?

05:01 25 A. Yes. SEER is a federation, if you will,

05:01 1 of several cancer registries across the country and
2 it's considered the best cancer registry information
3 available.

4 Q. Does the SEER data correlate for tobacco
05:02 5 usage?

6 MR. BERNARDO: Objection to the
7 form.

8 A. I don't understand.

9 Q. (BY MR. SPOHRER) Does it have a column
05:02 10 for the number of people who are using tobacco?

11 A. Oh, no, there is no information about
12 tobacco.

13 Q. And it's your belief that this data is
14 going to be converted into some type of an exhibit
05:02 15 for the trial?

16 MR. BERNARDO: Objection to the
17 form.

18 A. I don't have any belief about whether it
19 is or is not. I created these reports in the
05:02 20 context of a discussion about possible exhibits that
21 would be created for the trial. I don't know what
22 counsel is going to choose to do with it.

23 Q. What other exhibits have you suggested be
24 created to assess in your opinions?

05:02 25 MR. BERNARDO: Object to form.

05:02 1 A. I don't recall that I suggested this
2 exhibit. This was --

3 Q. (BY MR. SPOHRER) Regardless --

4 A. I don't --

05:02 5 Q. Regardless of who originated the
6 suggestion --

7 A. Okay.

8 Q. -- have you participated in discussions of
9 any other exhibits to illuminate your testimony?

05:03 10 MR. BERNARDO: Objection to the
11 form.

12 A. I'm not aware of any other specific
13 exhibit other than the one related to this data.

14 MR. SPOHRER: All right. I have no
05:03 15 further questions, Doctor. Thanks. You have the
16 right to read this or you may waive it and they may
17 want to advise you on that.

18 MR. BERNARDO: We advised her that we
19 are going to reserve our right to read and sign.

05:03 20 THE VIDEOGRAPHER: Time is 5:04,
21 we're off the record.

22 (Concluded at 5:04 p.m.)

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1 CHANGES and SIGNATURE DEPOSITION of
2 CARL PHILLIPS, Ph.D.

3 PAGE LINE CHANGE REASON

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25 CARL PHILLIPS, Ph.D.

ALLEGRO REPORTING SERVICE, INC.
440 Louisiana Houston, TX 77002 713/227-8404

I, CARL PHILLIPS, Ph.D., have read the foregoing deposition and hereby affix my signature that same is true and correct, except as noted above.

CARL PHILLIPS, Ph.D.

THE STATE OF TEXAS)

COUNTY OF HARRIS)

Before me, _____, on this day personally appeared CARL PHILLIPS, Ph.D., known to me or proved to me under oath or through _____ to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that they executed the same for the purposes and consideration therein expressed.

Given under my hand and seal of office this _____ day of _____, 2002.

NOTARY PUBLIC IN AND FOR
THE STATE OF TEXAS

My Commission Expires: _____

1

2 THE STATE OF TEXAS :

3 REPORTER'S CERTIFICATE

4 I, Elaine P. Maspero, RPR, Certified Shorthand
5 Reporter and Notary Public in and for the State of
6 Texas, hereby certify that this deposition
7 transcript is a true record of the testimony given
8 by the witness, CARL PHILLIPS, Ph.D., after said
9 witness was duly sworn or affirmed by me.

10

11 I further certify that I am neither attorney
12 nor counsel for, related to, nor employed by any of
13 the parties to the action in which this testimony
14 was taken. Further, I am not a relative or employee
15 of any attorney of record in this case, nor do I
16 have a financial interest in the action.

17

18 Certified to on this 29th day of September,
19 2002.

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Elaine P. Maspero
Elaine P. Maspero, CSR #320
Notary Public in and for
The State of Texas
Certification expires 12-31-02
Commission expires 8-11-05

